



THE

Northern Brewer

THE NEWSLETTER OF THE GREAT NORTHERN BREWERS CLUB

DECEMBER 2010

Prez Sez

by Dennis Sessler



It's the season: the holidays are upon us. Like it or not, they are here. As I write my article, Thanksgiving has just passed and all the crazies went shopping the day after. Maybe I should rephrase this; some that venture out

on Black Friday are crazy. Dena went down to our local Wal-Mart to save a few dollars on new bikes for our boys. They will be riding in style this spring. The sale started at midnight, so she got there early, around 11pm. She was way behind the power curve, the parking lot was at full capacity, she managed to get the bikes, and a few things then proceeded to the checkout line for the hour and a half wait. It's crazy that Wal-Mart forced their patrons to wait over an hour to check out. Wal-Mart should have been going around serving some beer or something for all these poor saps, which were waiting, and waiting. Maybe with an ample buzz some of the psychopaths would mellow out and begin to enjoy the true meaning of this holiday season.

This last month has brought some minor changes to our club. After elections were held at our monthly club meeting in November, we elected three new board members. Frank Bell, Shawn Plew and Matt Wallace were elected for 2 year terms. Jim Lamb and Tim Strayer will continue serving out the 2nd year of their term on our board. Joe Michael was elected to Vice President, Breck Tostevin was reelected to another term as our Treasurer, Julie McDonald was elected as our Secretary, and I was reelected as your President. I want to welcome and thank all of our new board members and officers. The selfless act of volunteering for our club enables everyone to brew the best homebrew possible and allow our club to continue to grow and prosper.

I would be remiss if I didn't thank all the outgoing officers and board members, who have served not only on the board of directors in one form or another but who have volunteered to organize or manage multiple events throughout their many years as members. First I would like to thank Steve Schmitt, for serving as our Vice President. Steve has served as President in the past and always been there to serve in any capacity and I thank him. Jennifer Bisson has served as our Secretary for the last year. I want to thank her for taking care of all the Secretary duties and for her insightful Secretary Corner articles. Our Board members who have served us are John Trapp and Tim Bisson. They both have coordinated and served the club at so many events and competitions over the years. John has served as past President, among other duties to the club. Tim has served on our board and was the lead on taking care of the last survey the club conducted, it gave future boards a positive direction to follow, and your tireless efforts are much appreciated.

The Prez Sez

GNBC TO-GA Holiday Party

2010 Autumn Pour Homebrew Competition Results

BJCP - Getting a Proper Beer Education

Final Call

Fur Rondy Homebrew Competition

Must Have Brewing Books and Magazines

Other Fruit Melomels

GABBF Volunteers Needed

Hops

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NEWSLETTER EDITOR

DEBBIE GRECCO

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I want to thank Mark Staples, President of Midnight Sun Brewing Company. Mark was the informational speaker at our November meeting. I had invited him to our meeting to tackle the monumental task of teaching the club members how to treat their water for brewing. Mark has a wealth of information on how to adjust water to brew certain styles of beer. He wrote the water treatment section for our local BJCP training course some years ago. Mark had all the information with him, but decided to take another path with his informational piece. There is one thing you all must know, there is nothing more boring than talking about ions of this and ions of that. Add X amount of grams of this to your water to come up with this amount of part per million, or milligrams per liter, I think you get the point. Had Mark taken this tack the crowd would have lost interest quick. Instead Mark carried the crowd with what everyone needs to know. Water is by volume the largest percentage ingredient in your beer. From what I have read water is the most important thing when it comes to brewing. Don't get me wrong, a lot of things have to come together to make a beer successful.

Mark had a short story on the making of MSBC flagship beer, Sockeye Red. When Billy Opinsky, owner of Humpys approached MSBC, he was looking for a house beer. Billy suggested a big hoppy 70 IBU IPA in the 5% ABV range. At that time there were no commercial beers on the market of this caliber, a very bitter hop bomb yet carrying a nice session beer experience. From what Mark had said it took 18 months for the brewery to figure out the secret to brewing this great beer. And the reason was WATER... Once the brewery was able to realize that the water needed to be Burtonized, which is to emulate the water from Burton on Trent, a classic beer making region in England, renowned for brewing the classic pale ales and IPA's, the rest is history.

Well almost, the name you now see on that bomber of Sockeye Red, wasn't the first name thought of for the beer. Mark divulged the name that Billy wanted his house beer to be called. Billy had suggested "Stinky Pinky", (with a big roar from the crowd) Mark explained that he was sorry but "Stinky Pinky" just wasn't gonna fly. MSBC was at that time a fledgling brewery trying to make its mark. I agreed with Mark, It was a wise choice (marketing wise), but now with all their success, the brewery could easily get away with that name now.

Thanks again Mark for making it to the meeting, you were very entertaining. If our membership has one thing to take from Mark's presentation, it is to learn all that you can about your water, get it tested and then figure out what you need to do to emulate the water of the style your trying to brew. I think you will be amazed on the difference in the quality of your beer.



By the time most of you read this newsletter, the 14th Annual Humpys Big Fish competition will have taken place or will be just around the corner. Entries were taken at Arctic Brewing Supply on Nov 27th, and should be resting peacefully in the beer cooler at Sub Zero. This is the last homebrew competition of the 2010 cycle. The home brewer of the year will be decided after this event and the traveling trophy will be awarded at the January club meeting that coincides with the GABBF. A special thanks to Jason Ditsworth for coordinating this event, and to Billy Opinsky for sponsoring this event for an impressive 14 years.

The weekend after the Big Fish, we will be having our annual Holiday party at the Snow Goose. Check out the article and get your toga sheet ready to go. I'll be bringing my photo setup so we can capture all the memories of the night; you just never know where these photos may end up..... My wheels are turning now!!

After December and the holidays we will be gearing up for the Great Alaskan Beer and Barleywine Festival, GABBF for short. Our meeting will be on Thursday January 13th, just before the beginning of the festival. This is our biggest and by far the most attended meeting of the year. There will be special guests, all the distributors and breweries, and almost all our members will be there. Our meeting will stretch well into the night and possible wee hours of the morning. All I can say is plan now. Make reservations at a local downtown hotel. Find a babysitter for the night, or the weekend. The three days surrounding the GABBF are fun filled and planning is needed to survive this monster. More details will be forthcoming in my article next month. All I can say now is if you want to volunteer, check out the article and volunteer form letter, found later in the newsletter and get it emailed off to Jeremy as soon as possible. Admission is FREE if you volunteer, so sign up and help out wherever you can.

I've submitted my first call article for Fur Rondy, check out my article and get brewing, some lucky brewer will be going down to Kassiks Brewery in Soldotna, to brew a batch that Frank and Deb Kassik select.

The remainder of the newsletter I tracked down some articles on Hops and making Melomels. The Mead article pairs very well with Mike Kikers informational piece at our October monthly meeting. The Hop article I snagged off Wikipedia, all the credit goes to them. I want to take an individual hop every month and zero in on it and let the membership know all that there is and how to brew with it. This could easily expand to grains used to brew with also.

In closing our final article will be a Last Call article on the passing our club member and friend to many Jim Taylor. Jim has been fighting cancer for years and we lost him on November 25th. All I can think is Jim is sitting there waiting to see us all again someday where we can all raise a glass one more time.

It's time to get brewing, make sure to have fun while doing so, and teach someone about our wonderful hobby. Make sure with the holiday season amongst us that we think before we drink. Take a cab, call a friend, or family member. Whatever you do, **Don't Drink and Drive**. Till we meet again, keep the flame to the kettle and BREW ON!!!



EVENTS

*Every First Thursday
Moose's Tooth First Tap*

*Every Friday
Midnight Sun Brewery Tours and
Brew Debut: 6:00 PM 344-1179*

*11.....GNBC Holiday Party Toga Style
6:30 pm at the Goose*

*13.....GNBC Monthly Meeting at the
Goose 7:00 PM*

*15-17.....Great Alaska Beer and Barleywine
Festival*

*23.....BJCP Classes Begin 5 - 8 PM at
Cafe Amsterdam*

*5.....Fur Rondy Homebrew Competition
Judging starts at 10 AM at the
Goose*



Venit, Vidi, Bibit, PARS!!! TO-GA!!! TO-GA!!!

by Joe Michael and Julie McDonald

Did everybody feel it? Those “snap” in the air that signifies the coming chill of the winter season? I know I did, and I’ll be bundling up on a daily basis to combat the cold. Every day, that is, except for Saturday, December 11th! In defiance of the low temperatures, I’ll be trading in the down coat for a bed sheet and sandals! That’s right GNBCers....time to TOGA!! (Commence chanting now.)

Mark your calendars now for the GNBC 2010 Holiday Party! We’ll be celebrating the holiday season and the end of year MMX...err...2010 on Saturday, December 11th with a toga party down at the Snow Goose. We’ll dine potluck style on Mediterranean fare, and of course be enjoying the finest in craft and homebrewed beer this side of ancient Rome! The basement of the Goose will be festively decorated, with plans for music, staged photos, costume contests, and loads of fun! We’ll even make room for the dance floor in the hopes of re-creating that famous “Shout” scene from “Animal House” (I’m looking to John Craig for inspiration here...).

Plan to help us fill the potluck table with plenty of Mediterranean delights. This will be the theme for this year’s “food grotto”. The breakdown for “who brings what” is as follows (the dish you bring will be determined by your last initial):

A – J = Desserts

K – P = Appetizers, salads, side dishes

Q – Z = Main dishes, soups

Get your thinking Santa-caps on and come dressed in something truly original. The standard white toga is fine for the run-of-the-mill party, but for the GNBC party, white bed sheets are SO old world. Get festive this year with attire that marries toga with the holiday spirit! Seasonal bed sheets, reindeer antler laurels around your head, strategically placed mistletoe....whatever you can dream up! We’ll be attempting to hold a costume contest, and possibly other fun things in this vein to be announced as well. Most importantly we want everyone to be comfortable and have fun!!

Joe is currently working on a playlist for background music. If you would like to request certain songs/artists for the playlist, please contact him at joeofak@gmail.com. He has access to a wide variety of music if you can name it, he can usually find it and load it up for you! Let him know what you want to hear! We’ll try to strike a good balance between holiday music, the opposite of holiday music, and Warren Zevon.



Gift Exchange: Yes, but not mandatory.

- If you wish, bring a wrapped bottle of a rare or unusual beer, or a fine bottle of wine or scotch, whiskey, or other spirit.
- Leave it on the designated table when you enter.
- Don’t forget to take a gift before leaving the party for the evening. **Please only take a gift from the exchange if you brought one.**

Of course, this should go without saying, but we’re going to say it anyway....have a designated driver or procure a room for the night, preferably one within walking distance...just be sure to get to the party and home again safely!

We hope to see everyone out for the party! Festivities begin around 6:30pm on Saturday, December 11th in the basement of the Snow Goose! Be there or be nowhere!

2010 Autumn Pour Homebrew Competition Results

The 2010 Autumn Pour Homebrew Competition was held in Juneau, October 29th, just in time for Halloween!

Alaskan Brewing hosted the team of judges at the Brewery on Friday evening. The awards ceremony was Saturday, October 30 at the Alaskan Bar in Downtown Juneau. Thanks to the folks at Arctic Brewing Supply and Specialty Imports for graciously offering to collect and ship the entries from Anchorage to Juneau free of charge.

Congrats to all of the winners and thank you to Steve Pierce, Cindy and Kevin Burchfield, everyone who judged and helped organize the competition and/or entered their home brews . . . Here are the results!

Autumn Pour 2010 Official Results

Division 1 Lager, Light Hybrid Beers, Scottish and Irish Ales & Witbiers

Flight 1: Lagers, Pilsners, Bocks

- Gold- Steve Pierce, Munich Dunkel # 48
- Silver- Skye Stekoll, Oktoberfest #62
- Bronze- Scorch Burnett, Doppelbock #11
- Honorable Mention: Ernest Franklin, Bohemian Pilsner #82

Flight 2: Light Hybrid Beers

- Gold- Amy Lamonica, Kolsch #30
- Silver- Amy Lamonica, Kolsch #27

Flight 3: Scottish and Irish Ales

- Gold- Amy Lamonica, Irish Ale #28
- Silver- James Kohler, Scottish Export 80/- #2
- Bronze- Kit Watts, Strong Scotch Ale #38

Flight 9: Witbiers

- Gold- Kevin Sobelesky, Witbier #86
- Silver- Amy Lamonica, Witbier #31
- Bronze- (tie) James Kohler, Witbier #3
- Kevin Sobelsky, Witbier #83

Division 1 Winner: Amy Lamonica, Kolsch #30

Division 2: American and English Ales & IPA's

Flight 4: English and American Pale Ales

- Gold- Steve Pierce, American Pale Ale #75
- Silver- James Harvey, English Pale Ale-ESB #60
- Bronze- Steve Pierce, American Pale Ale #74

Flight #5: English and American Brown Ales

- Gold- Michael Lamonica, English Brown Ale- Mild #24
- Silver- Amy Lamonica, English Brown Ale-Mild #34
- Bronze- Steve Pierce, American Brown Ale

Flight #8: India Pale Ales-(IPA's)

- Gold- Kevin Sobelesky, English IPA #85
- Silver- Ted Rosenweig, American IPA #80
- Bronze- Kit Watts, American IPA #39

Division 2 Winner: Michael Lamonica, English Brown Ale #24

Division #3: Porters, Stouts, German Wheat & Rye Beers, and Strong Belgian Ales

Flight # 6: Porters

- Gold- James Harvey, Brown Porter #59
- Silver- Ted Rosenweig, Baltic Porter #81
- Bronze- Shannon Seifert, Robust Porter #52

Flight # 7 Stouts & Barleywines

- Gold- Michael Lamonica, Foreign Export Stout #22
- Silver- Michael Lamonica, Russian Imperial Stout #23
- Bronze- Michael & Amy Lamonica, American Barleywine #26

Flight # 11 German Wheat & Rye Beers & Strong Belgians

- Gold- Ted Rosenweig, Belgian Blonde Ale #79
- Silver- Steve Pierce, Weizenbock #49
- Bronze- James Kohler, Roggenbier #5

Division 3 Winner: Ted Rosenweig, Belgian Blonde Ale #79

Division #4: Belgian and French Ales, Fruit and Spiced Beers, Specialty Beers, Meads and Ciders

Flight # 10: German Wheat, Belgian and French Ales

- Gold- Amy Lamonica, Belgian Pale Ale #33
- Silver- James Kohler, Saison #6
- Bronze- James Kohler, Belgian Specialty Ale #4
- Honorable Mention: Ted Rosenweig, Belgian Specialty Ale #77

Flight # 12: Fruit, Spiced, Herb & Vegetable Beers

- Gold- Scorch Burnett, Pumpkin Ale #14
- Silver- Skye Stekoll, Christmas Spice Beer #64
- Bronze- Shannon Seifert, Blueberry Brown #53

Flight # 13: Specialty Beers, Meads & Ciders

- Gold- Scorch Burnett, Braggot #20
- Silver- Michael Lamonica, Orange Chocolate Stout
- Bronze- Skye Stekoll, Jagermeister Baltic Porter

Division #4 Winner: Scorch Burnett, Braggot

Best of Show Competition Finalists

Winner of Division 1, Lagers, Light Hybrid Beers, Irish and Scottish Ales and Witbier:

Amy Lamonica, Kolsch #30

Winner of Division 2, American & English Ales, IPA's:

Michael Lamonica, English Brown Ale/Mild #24

Winner of Division 3, Porters, Stouts German wheat & Rye, and Strong Belgians:

Ted Rosenweig, Belgian Blonde Ale #79

Winner of Division 4, Belgian and French Ales, Fruit/Spice/Herb/Vegetable Beer, Specialty Beers, Meads & Ciders:

Scorch Burnett, Braggot # 20

Best of Show: Ted Rosenweig, Belgian Blonde Ale #79

2011 Home Brewer of the Year Categories

By Dennis Sessler

Below you will find the list of BJCP Categories that will garner points towards the coveted Home Brewer of the Year. A traveling trophy is awarded to the homebrewer who throughout the year accumulates the most points.

This Award is presented at the January GNBC club meeting which coincides with the Great Alaskan Beer and Barley Wine Festival.

Here is the run down on how points will be scored:

- Each Category has several sub categories, **only** your highest scoring entry per category will be awarded points. This will minimize the shot gunning affect.

- Points will be awarded as follows

1st -6 points

2nd -4 points

3rd -2 points

If your HBOY entry wins Best of Show you will earn another 2 points

Fur Rondy Home Brew Competition

Category	Name
1	Light Lager
4	Dark Lager
5	Bock
19	Strong Ale
22	Smoke Flavored/Wood Aged Beer
23	Specialty Beer

Snow Goose Break -Up Home Brew Competition

Category	Name
3	European Amber Lager
6	Light Hybrid Beer
8	English Pale Ale
10	American Ale
15	German Wheat and Rye Beer
20	Fruit Beer

Anchor Town Invitational Home Brew Competition

Category	Name
2	Pilsner
7	Amber Hybrid Beer
14	India Pale Ale (IPA)
17	Sour Ale
21	Spice/Herb/Vegetable Beer
27	Standard Cider and Perry

Equinox Mead Competition

Category	Name
24	Traditional Mead
25	Melomel (Fruit Mead)
26	Other Mead

Humpy's Big Fish Home Brew Competition

Category	Name
9	Scottish and Irish Ale
11	English Brown Ale
12	Porter
13	Stout
16	Belgian and French Ale
18	Belgian Strong Ale
28	Specialty Cider and Perry

Keep in mind that with exception to the Snow Goose Spring Break-Up Competition and the Equinox Mead Competition all the other competitions are open to all 28 BJCP Categories. But only these preselected categories will garner points in this year long competition. Also keep in mind that every competition except the Anchor Town Invitational has the added bonus that your home brewed beer or mead could be brewed professionally by one of our sponsoring breweries.

So now that the criteria have been set let's get those winning recipes formulated and get brewing. The first competition (Fur Rondy) is just around the corner in February. All style guidelines can be found on the BJCP website at <http://www.bjcp.org/2008styles/catdex.php>



Getting a Proper Beer Education

By *Dennis Urban*

The Great Northern Brewers Club is sponsoring Beer Judge Certification Program (BJCP) classes again next year. The primary objective of this course is to help you pass the BJCP exam, but many have taken this class in the past with no intention of taking (or passing) the exam because it is a great way to improve your knowledge of beers - not only for judging and evaluating beers but also making and enjoying beer and of course impressing your friends and coworkers.



Classes will be on Sunday evenings from 5 to 8 pm at Cafe Amsterdam beginning on January 23rd, 2011. There will be a total of 9 classes with the 10th session being a mock exam. The class size will be capped at 50 participants and will be first come first served on the first day of class. A typical class consists of a couple hours of lecture and discussion, followed by tasting and evaluating beers. Because of new restrictions by the BJCP only 12 participants will be able to take the actual exam and the earliest exam date I could secure for next year was November 6, 2011. We still have not decided the fairest way to select who gets to take this exam if we have more than 12 wanting to take the certification exam. If there is enough interest I can schedule another exam without this associated course. We have not determined the total cost of the course yet, but should have a final cost by next month. My latest guess is \$35 for the course manual and \$30 for the beers we sample. The exam costs \$50 for first time takers and \$30 for re-takes.

Something that has been missing the last couple of courses is brewing a beer at someone's house to demonstrate all the steps necessary to brew an all-grain beer. If you are experienced all-grain brewer and willing to have a group of people over to your house to watch you brew please let me know. I am also looking for National ranked judges that are interested in helping teach the course or proctor the certification exam.



2011 Homebrewer of The Year Categories

Fur Rendezvous HBC

- Category 1
- Category 4
- Category 5
- Category 19
- Category 22
- Category 23

Snow Goose HBC

- Category 3
- Category 6
- Category 8
- Category 10
- Category 15
- Category 20

Anchor Town HBC

- Category 2
- Category 7
- Category 14
- Category 17
- Category 21
- Category 27

Equinox Mead HBC

- Category 24
- Category 25
- Category 26

Humpy's Big Fish HBC

- Category 9
- Category 11
- Category 12
- Category 13
- Category 16
- Category 18
- Category 28

Final Call

By Dennis Sessler

This article comes with a heavy and saddened heart. This past Thursday morning, the 25th of November, a long time GNBC member and great friend to all, passed away. Jim Taylor, Jimmy to those who knew him best, was a quiet and constant presence at most all of the club's functions. He was passionate about life, people, brewing, and great beer. As a matter of fact, Dena was just telling me that the last time Lisa Petrola of Arctic Brewing Supply saw him; he was regretting the fact that he got rid of his brewing equipment. Wanting to keep marital peace, he purchased a small beginner/novice kit instead of replacing the equipment that he sold. He always had a smile on his face in those final, difficult days. Jim will be missed! I would like to think that he is as we speak, patiently awaiting the vices will be held at Faith Lutheran Church on Sunday, the 4th of December at 10:00am at to Janis and their family.



so he could brew a batch of beer. and a kind word for everyone, even be greatly missed but not forgotten preparing some great homebrew, arrival of all of us someday. Ser-Church (5200 Lake Otis Pkwy.) Sat-2:00pm. Our thoughts and prayers

Fur Rondy Homebrew Competition

By Dennis Sessler

That's right it's almost time for the the Fur Rondy Homebrew Competition. Our club actually has little association with the actual festival, probably because we take care of everything on our own. It's a great way to kick off the New Year, the daylight is slowly making an appearance, and in fact the second week of February is about the time that the sun actually makes its appearance on my home. Well enough about all the winter stuff and on to the details.



The competition will be held on **Saturday, February 5th** at the Snow Goose. This will be the first competition in 2011 to garner as many points as possible towards the 2011 GNBC Homebrewer of the Year Competition. **The categories which will garner points towards the year long competition are 1 Light Lager, 4 Dark Lager, 5 Bock, 19 Strong Ale, 22 Smoke Flavored/Wood Aged Beer and 23 Specialty Beer, but by no means are you restricted to just enter those beers, enter as many as you like.**

Judging will begin at **10:00 a.m.** and as always there will be a need for plenty of judges and stewards. This competition is an AHA/BJCP sanctioned competition so all beer, mead and cider categories will be open for entry. You can find the current style guidelines at <http://www.bjcp.org/stylecenter.html>. And entry forms can be found at http://www.bjcp.org/docs/SCP_EntryRecipe.pdf.

Entries will be accepted at the Snow Goose in the basement on Friday February 4th. From 11:00 am to 6:00 pm. For current GNBC members, there is **no entry fee**, for non members, a \$5.00 fee per entry. You will need to provide three 12 oz. bottles for each beer entry. Mead and Cider entries can be three 12 oz bottles or one 750 ml bottle. If you are unable to drop off entries during that time please feel free to contact me to make other arrangements.

This year's competition will award a Best of Show Beer and a Best of Show Mead or Cider. There will be unique prizes for both of the Best of Show winners plus all the great Fur Rondy medals and notoriety. Kassik's Brewing Company will be in attendance and like last year they will be selecting an award winning beer to brew it commercially. That beer will be eligible to be entered at the Great American Beer Festival Pro-Am Competition in September 2011 in Denver CO. I will have all the leftover beer/meads and ciders along with all the judge evaluation sheets and the awards at the February 15th homebrew club meeting.

Let's make this a great competition. Dust off your mead and ciders, brew those beers and let's get ready to "Rondy!" For more information contact me at sessak@mtaonline.net.

**D I M O N D
L I Q U O R**

Must have Brewing Magazines and Books

by *Dennis Sessler*

It really doesn't make a difference if you're new to brewing, or have just finished your 100th batch. We all have a lot to learn about the art of brewing. When I started brewing, like 7-8 years ago, I was starving for information. I would attend monthly meetings and competitions trying to absorb everything I could about the art. I soon learned that the 2 hrs at the meetings and 4-5 competitions a year weren't enough to learn all that I wanted to know, hell I was starving for knowledge, and short of attending a brewing school, I wasn't going to get the skinny unless I started to read, read, read.

I hate reading; I really couldn't stand it in high school. I knew that college wouldn't be my thing either. Way too much reading and test taking, about things I could care less about. But when it came to things I was interested in, there was never an issue of me locking onto it. Below is a list of the most popular beer magazines and books.

Take in mind some of these magazines/books are slanted toward the commercial (Micro's) brewers, which is fine if, what you are getting out of the magazine or book helps you in your quest for brewing knowledge. I have weeded out a lot of what I thought were over bearing toward the commercial aspect with little information for us fledgling brewers.

All About Beer

Magazine features the history and variety of beer, including methods & traditions of beer making, and the political & social environment that affects the pursuit of beer pleasure.

American Brewer

This mag is 100 % craft beer orientated, enjoy at \$50.00 a year for 6 issues.

Beer Advocate

Beer advocacy community and magazine that promotes the craft beer industry through beer education, appreciation, beer reviews, and guides to breweries, brewpubs, beers, bars, breaking news, forum, beer events and festivals.

Beer Magazine

I haven't read this one yet but, it's on my wish list for the holidays. I found it on the web, and it looks like a well designed magazine with plenty of Homebrewing and Craft beer article with lots of Beer Girls scattered amongst the pages.

Beer Connoisseur

Mostly set toward the commercial side, but a quality top end magazine, with beer and food pairing articles and wonderful taken pictures.

Brew Your Own

In my opinion the best all around Magazine devoted to Homebrewing.

Brew Your Own is a how-to homebrew beer *magazine* for all levels of *brewers*, from the beginner to the all-grain expert

Celebrator Beer News

US newspaper providing beer features, regional news and beer reviews.

Draft Magazine

DRAFT Magazine is an American magazine that celebrates the world of beer and beer culture. The magazine is known for its articles about "good times and great beer", and for the celebrities that appear on its cover.

Zymurgy

The magazine of the American Homebrewers Association. You will automatically receive this magazine with an annual membership in the AHA. Although the title may be misleading, it is a homebrew mag with a progressive



slant towards **Commercial beer**, something I don't like seeing. Over the years it's my belief that it has become an advertising piece for the BA (Brewers Association)

My Favorite Books

- The New World Guide to Beer, by Michael Jackson
- The Complete Joy of Homebrewing, by Charlie Papazian
- The Complete Meadmaker, by Ken Schramm**
- Brew Like a Monk, by Stan Hieronymus
- Farm House Ales, by Phil Markowski
- Radical Brewing, by Randy Mosher**
- The Brewers Companion, by Randy Mosher**
- Designing Great Beer, by Ray Daniels**
- Extreme Brewing, by Sam Calogione
- Classic Beer Style Series, written by various authors. There is something like 20 books in the series, each one with an in-depth history and "how to brew" for each classic beer style.



Almost all of the magazines are also in "online" form. For me I need to feel the paper on my fingers, I need to read things over at least twice sometimes more to get all that information locked into my vault. The above books and magazines in bold are my favorites and must haves. You will also find the magazine titles hyperlinked for ease of finding them on your browser. Enjoy the reading and get yourself educated, y



Other Fruit Melomels – for Experienced Dummies

by Curt Stock

Melomel is mead comprised of honey and fruit. Two varieties of melomels are Cyser (mead with apple cider) and Pyments (mead with wine grapes). This article will concentrate on other fruits. Below is what I believe to be the most important things to remember when making melomels:

- The person you need to make happy is yourself.
- 2. There are many different ways to make wonderful mead – no one individual has all of the right answers or techniques.
- 3. Be creative – if it sounds good to you – try it!
- 4. Listen to people with experience and learn as much as you can, then apply the knowledge you find valuable to your mead making process.
- 5. Making bad mead is easy – making great mead is just as easy.
- 6. The best way to improve your mead-making is practice.

The Fruit

Type. Choosing a fruit for your melomel is as simple as deciding what type of fruit you like. If you enjoy eating the fruit, it will likely yield pleasant mead. My favorites include berries of any kind, including strawberries, raspberries, blackberries, blueberries and currants. Stone fruits such as cherries, plums, peaches and apricots also produce great mead. I've also tasted some great meads made with melons. Basically, any fruit you have access to can be used in a melomel. Any combination of fruit that is pleasing to your palate also will do fine. Use your taste buds and imagination, and you will not be disappointed.

Amount. The amount of fruit used can be varied depending on preference, sweetness level and type of fruit. I like sweeter meads, which allow the use of a lot of fruit. When using berries or stone fruits I use a minimum of three pounds per gallon – usually, more like 3.5 to 4 pounds. The sweetness balances the acid content of the fruit and helps to bring out the actual fruit character in the finished mead. If you prefer dryer mead, I suggest reducing the fruit to 1 to 1.5 pounds per gallon, as well as keeping the alcohol content below 10% ABV. This will reduce the harshness of the finished melomel.

Preparation. Care should be taken when selecting and preparing fruit. If you are hand picking or buying from a local market, make sure to discard any poor quality or moldy fruit. If you wouldn't eat it, you shouldn't use it in your mead. Remove all stems and leafy material. Clean the fruit, then freeze it to help breakdown the cell walls. Stone fruits, with the exception of cherries, should be pitted and frozen. (Cherry pits lend a very nice character to melomels if removed within 4 weeks.) When using fruit in the primary fermentation, there is no need to puree the fruit. Fermentation and other processes discussed later will sufficiently break up the fruit. Mash the bags of fruit with your hands just before you add it to the fermenter.

I have often used bags of frozen fruit from discount stores and super markets. Fruit from these sources works very well, and the fruit is already clean. Using pureed canned fruit will provide acceptable results but be prepared for significant waste. Pureed fruit will settle to the bottom of the fermenter in a 2 to 4 inch layer that is virtually unrecoverable. Fruit concentrates are a nice solution when whole fruit is not available. The resulting mead will be good but lacking in real fruit character. A combination of concentrate and a few pounds of whole fruit will improve the quality. When using concentrates make sure they do not contain preservatives that will inhibit fermentation.

Fermentation. There are two schools of thought (and plenty of debate) on when to add fruit to your mead. Many people believe that, to preserve the fruit character and aroma, fruit should be added to the secondary fermentation. This method works well but can have a couple of drawbacks. The fruit will have to steep in the secondary fermenter for many weeks or months to extract all the goodness the fruit has to offer. In addition, considerable aging will be needed to have the fruit and honey meld together into a great beverage. Renewed fermentation could also result from the sugar in the fruit. If primary fermentation was completed in part by the alcohol content reaching the yeast's tolerance level, fruit added to the secondary will dilute the alcohol content (fruit is typically 70% water) allowing the yeast to reactivate.

After my first few batches I started fruit in the primary fermentation (FPF). There are many benefits to this technique. Fruit will provide many of the nutrients needed by the yeast during fermentation and help to regulate the pH of the fermenting mead must. PPF will typically take much less time than traditional mead fermentations. [I've won awards for meads that were six weeks out of the primary with this method.] Fermentation of mead with an original specific gravity up to 1.145 should be complete in three to four weeks in most cases.

FPF will extract fruit character during fermentation without expelling the aroma compounds. Only the most volatile aroma compounds will be lost. These most volatile aroma compounds are usually lost during multiple rackings and aging. The fruit and honey components will be fully integrated after a month or two in secondary. If a fresh fruit character is desired, try adding a pound per gallon of fruit to the secondary, which adds another level of fruit character to your melomel.

The Honey

Honey choice in a big melomel is not that crucial. Varietal honey character will be overshadowed in most melomels by the strong fruit character. A couple common exceptions to this could be orange blossom or tupelo honey. With less assertive fruits (stone fruits in particular) these honeys can add a great complexity to the finished mead. My favorite honey for melomels is high quality late summer or fall wildflower honey. Late season wildflower has more complexity and spicy character than early season wildflower. Early season nectar sources in my area of the country produce honey that is not as desirable for mead. Dandelion and Basswood blossoms from northern climates produce honey that can be fairly harsh when fermented.

The Water, Nutrients, Yeast and Yeast Health

Get a good source of water. Using spring water or other water that is free of chlorine and bacteria is essential. Carbon-filtered, pre-boiled tap water will work fine, but if you have hard water, consider using bottled spring water.

A real advance in mead-making in recent years is called *staggered nutrient additions* – or SNA. Instead of adding all the nutrients at once, the same amount is staggered over several days. SNA promotes yeast health and helps assure a fast, clean and healthy fermentation. One thing I like, you can drink the mead sooner because it doesn't require as much aging depending on yeast choice.

SNA was developed by the commercial wine industry as a way of supplying nutrients as the yeast needs it during the growth phase – kind of a just-in-time delivery. Healthy yeast are essential for a clean fermentation with less chance of off-flavors or the production of higher alcohols (fusels) which can give mead a burning sensation on the back of the throat – the “rocket fuel” sensation.

I prefer to use Fermaid-K (yeast energizer) and diammonium phosphate or DAP (yeast nutrient) for adding the additional nutrient requirements of the yeast during fermentation. One teaspoon of Fermaid-K and two teaspoons DAP should be adequate for a 5 gallon batch. You can mix them together for a stock blend and add them using the following schedule:

- Add $\frac{3}{4}$ teaspoon yeast energizer/nutrient mix immediately after pitching yeast.
- Add $\frac{3}{4}$ teaspoon yeast energizer/nutrient mix 24 hours after fermentation begins.
- Add $\frac{3}{4}$ teaspoon yeast energizer/nutrient mix 48 hours after fermentation begins.
- Add $\frac{3}{4}$ teaspoon yeast energizer/nutrient mix after 30% of the sugar has been depleted.

Anyone who has ever stirred a fermenting beverage knows the foaming, triggered by the release of CO₂, can make one heck of a mess! To help minimize this, you should mix the nutrient blend into $\frac{1}{2}$ cup of must and add it back to the fermenter. Then begin to slowly stir the must to release the main portion of the CO₂ gas. After the foaming has subsided you can begin to stir more vigorously. Mix the must well enough to introduce plenty of oxygen into the fermenting must. Oxygen is needed by the yeast throughout the growth phase. Oxidation is not a huge concern until you get past 50 percent sugar depletion.

SNA serves many purposes for yeast health. Abundant CO₂ is toxic to yeast, so mixing while adding the nutrients will release the gas. Vigorous mixing introduces oxygen need by growing yeast. The mixing also disturbs the fruit cap (or floating fruit). Punching down the cap should be done at least three times a day during the period of vigorous fermentation.

Cap management is important for many reasons. Releasing toxic CO₂ and preventing temperature buildup below the cap. For every 1 degree reduction of brix in the must, there is approximately a 2°F increase in temperature. Unmanaged, the temperature can increase to the point of killing your yeast in the heat zone below the cap, potentially driving off the floral fruity character of your fruit. This is less of a concern in the five gallon homebrew scenario but could still be a potential problem. If the cap is not pressed down into the must it can dry out. Then, if oxygen is introduced, spoilage organisms grow and produce off flavors.

The pH of the mead must is important for healthy fermentation. pH will drop during fermentation. Yeast can adapt to the lower pH environment to a point, but an extreme drop in pH could result in a stuck fermentation. Some fruit contains enough potassium to buffer the pH and keep it an acceptable range. But it is a good idea to adjust the pH of the must to 4.0 prior to starting fermentation. Potassium carbonate works well for adjusting pH and provides potassium, which aids in keeping yeast healthy. But be careful. Using too much carbonate will reduce the total acidity of the must and cause acid balance issues in the final mead. Excess carbonate can also impart a metallic or soapy note in the flavor. I wouldn't use more than 5 grams of potassium carbonate when adjusting pH of the must. For measuring pH, use a good quality calibrated pH meter instead of pH test paper. Seem like a lot of messing around? Remember rule No. 5 in the beginning of the article – you only get out of it what you are willing to put into it! You need to keep these little sugar-eating alcohol-excreting beasts healthy and happy because they are doing all the work. There are billions of them; you don't want them pissed off!

The Equipment

A large wine fermentation pail (7.9 gallon) works well for melomels due to the extra head space. Extra space is need for the fruit cap, stirring and degassing. A hydrometer or refractometer should be used for original gravity (OG) and determining the sugar depletion for the final SNA. (Note that bigger meads can have an OG that exceeds the upper limit of most refractometers.) A 5-gallon glass carboy for secondary fermentation and aging works best. A wine-degasser – a folding propeller on a stick – is a handy tool to use with an electric drill.

The Process

Submerge the honey containers in hot water to loosen the honey, which will make it easier to dissolve. Partially or totally thaw the fruit. This should be obvious, but needs to be stated: sanitize all equipment used for making your mead. Mash the bagged fruit with your hands. If you prefer, put all the fruit into the pail and mash with a potato masher or similar tool. If using fruit with thick skins (currants, cranberries, etc.) break as many of the berries as possible to release the juices.

Use enough honey and water to get a total volume of 4.5 to 5 gallons (excluding fruit). Honey weighs approximately 12 pounds per gallon. Put all the fruit into the 7.9-gallon fermenting pail. You will want the temperature of the mead must to be 65 to 70 °F. If the fruit is still very cold you should heat the water enough to bring the temperature of the must into that range. Add the honey and water to the pail. Use a drill-mounted wine degasser to mix the must and completely dissolve the honey. After the honey is dissolved, stir vigorously for a few minutes to aerate the must. I do not heat the must to pasteurize the honey or fruit. I've made at least 50 batches of mead with the no-heat method and have not experienced a contamination problem.

Prepare your yeast by re-hydrating following the instructions on the packets. The use of a re-hydration nutrient such as Go-Ferm is highly recommended. This will prepare the yeast for the strenuous journey ahead of them. Pitch the yeast, add the first SNA and mix well.

Fermentation should begin in about 12 to 24 hours. When signs of fermentation are noticed, start managing the fruit cap and begin the SNA schedule. With some luck, fermentation will be complete in two to four weeks. Once half of the sugar is depleted, continue to punch the cap at least twice a day but refrain from introducing oxygen into the must. Allow the mead to stay in primary for 4 weeks. At that point, transfer to the secondary carboy for clarifying. Taste the mead for sweetness level. If you desire more sweetness, now is the time to adjust it.

To sweeten mead, start with a cup of the mead and add honey to a level sweeter than you want. Then blend the dryer mead with the sweetened sample to get three samples that vary by 10 gravity points ranging from too sweet to not sweet enough. Taste and blend the samples until you get the sweetness level you want. Get some help with this as your palate may get fatigued. In my opinion, women have better palates for tasting mead than men. I rely on my wife, Kathy, for help.

Take a gravity reading of the sample you chose. Determine the specific gravity difference between the mead and the sample. Now you can figure out how much honey you will need to sweeten the entire batch to the desired level. One pound of honey will raise one gallon of mead approximately 34 gravity points. If you have 5 gallons of mead, each pound of honey will raise the batch about 6 to 7 points.

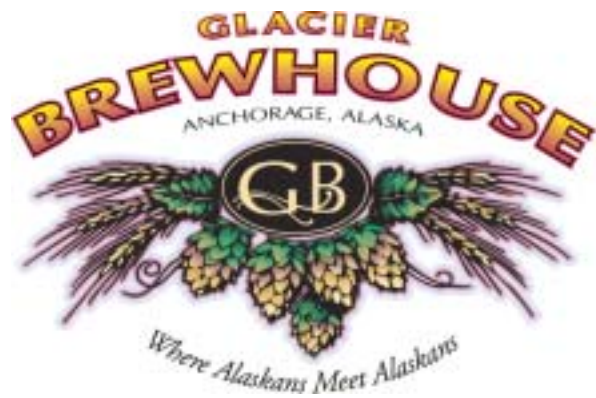
Once you determine how much honey you need to add to the batch, use 1 cup of boiled water per pound of honey to dilute the honey. Pour the mixture into the carboy and mix until evenly dispersed. Take a sample and see if further adjustment is needed. Take caution to keep from over-sweetening the batch. It's much harder to make it drier!

After a month or two if the mead is not clear, transfer again and use a two-stage clarifier such as Super-Kleer. You can also use relatively inexpensive plastic filters with filter pads, pumping the mead from one keg, through the filter to a second keg. You will be amazed by the amount of fruit debris and insect parts on the filter pads, but your mead should be sparkling clear. One word of caution when filtering, pectin will clog a filter very quickly. You can use pectic enzyme to help remove the pectin. Two stage clarifiers do not remove pectin. Once you are completely sure there is no fermentation and the mead is clear, you can bottle. For sparkling mead, I suggest kegging and force carbonating. Bottle-conditioning sweet mead can be difficult, as well as creating exploding bottles.

A big thank you to Paul Dienhart for proofing and structure tips for this article!
That's what I know, I hope it helps. Good luck!

Recipe

Strawbana Cabana Mead
Strawberry Banana Melomel
22 lbs Wildflower Honey
18 lbs Strawberries - frozen
4 lbs Ripe Bananas (about 8 bananas)
3 gal Water
3 tsp Yeast Energizer/Nutrient Blend (Fermaid-K and DAP)
10 g Lalvin Narbonne Yeast (71B-1122)
Approximate OG 1.155
Target FG 1.025 to 1.035
Estimated ABV 16.0%



Follow process instructions above article. Fermentation will last 2 to 4 weeks. Once complete, rack to secondary fermenter. Now it's time to add the bananas. Purchase about 4 pounds of ripe bananas. Trim off the stems that look moldy. Rinse the unpeeled bananas to remove molds and bacteria. Place a funnel in the carboy, peel and place the bananas in the funnel. Use a racking cane or other device to mash the bananas into the carboy. This should break them up enough to extract the flavors and aromas. In 3 to 4 weeks, rack to another carboy for aging and clarification. This mead is best at a final gravity between 1.025 and 1.035.

Triple Berry Mead

Triple Berry Melomel

20 lbs Wildflower Honey

15 lbs Triple Berry Mix (Blackberries/Raspberries/Blueberries)

3 gal Water

3 tsp Yeast Energizer/Nutrient Blend (Fermaid-K and DAP)

10 g Lalvin Narbonne Yeast (71B-1122)

Follow process instructions above article.

Approximate OG 1.151

Target FG 1.025 to 1.035

Estimated ABV 16.1%

Super Berry Melomel

Multi-Berry Melomel

21 lbs Wildflower Honey

12 lbs Triple Berry Mix (Blackberries/Raspberries/Blueberries)

6 lbs Strawberries

96 oz Black Currant Juice (free of preservatives)

2.3 gal Water

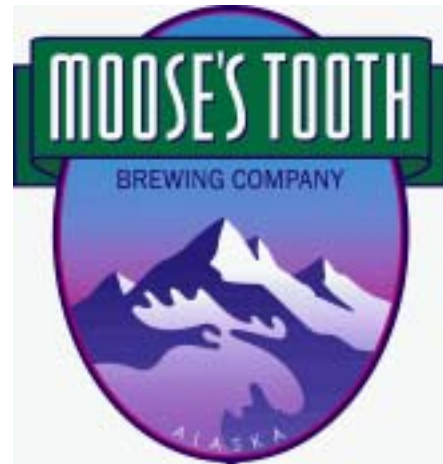
3 tsp Yeast Energizer/Nutrient Blend (Fermaid-K and DAP)

10 g Lalvin Narbonne Yeast (71B-1122)

Approximate OG 1.158

Target FG 1.030 to 1.040

Estimated ABV 15.8%



Follow process instructions above article.

"beer blurb" : I (along with my wife Kathy) started homebrewing in 1996. In 2003 we started making mead after picking up a copy of Ken Schramm's book (The Complete Meadmaker) at the AHA Conference in Chicago. We have been to every conference since Chicago. In 2003 I became a BJCP Certified judge. I was elected to the AHA Governing Committee in 2006. We have been very active in homebrew competitions by entering, volunteering and organizing. We have been lucky enough to win a few beer and mead Best of Shows including two AHA Mead Club Only Competitions and the 2005 AHA Meadmakers of the Year. We still make more beer than mead, but it's getting closer to even! I co- founded the Saint Paul Homebrewers Club (2007 AHA Club of the Year) with Gary Hipple. Your best resource for improvement is your fellow homebrewers. Don't be afraid to ask questions.

GABBF Volunteers Needed

by *Jeremy Hegna*

Greetings....to the Mega Force!!! The Future Volunteer Staff for the 2011 Great AK Beer and Barley Wine Festival!!!!

We're hoping to have all of you back in January....this (coming) year's dates are January 14 & 15th at the Egan Center. At this point, until I've gone through all of the "returning" volunteer's information, I would like to keep everyone in the same position that they were in last show. AFTER I've gone through everything, YES, there will be an opportunity to move around if you'd like. First though, I need to know who's coming back, who's certified to pour, and who is available when.

Again, as in years past, you **WILL BE** granted free admission to the session of your choice (with a glass and samples). First time volunteers **MUST** volunteer for their shift first before attending a free session. Generally, first time volunteers will either work Friday night or Saturday's Connoisseur Session. If you could copy and paste this article into an email with the information below filled out, that would be GREAT! I will be in touch with everyone, either via email or phone to confirm your position.

There are over 350 volunteers every year that make this show possible. Once again, Aurora Productions would like to thank each of you in advance for your help this year. If you are interested in being a pourer this year...but haven't done it in the past, I will be scheduling a few TIPS classes (Formal Alcohol service training good for 3 years and throughout the United States....not just Alaska) in the months December and January (just before the show), depending on demand. The price is about \$35....and is NOT essential for being a volunteer at the festival....ONLY to be a pourer. If you are interested, please note that in your return email.

Name:

Phone # (and best time to reach you):

Email address:

TIPS/TAM certified:

Do you remember which day you worked last year?:

Do you remember which shift you worked last year?

Do you remember what you did? (Bread. Wristbands. Glasses. Pouring. Etc):

Is the same schedule that you worked last year going to be OK this year?

Are you interested in TIPS training in December to become a pourer?

Again....if you could simply copy and paste this article into an email with your answers and send to jeremy@auroraproductions.net that would be the most efficient. Please try to limit your response to ONE email....again, as there is a LOT of you! IF you have a friend or family member that would also like to volunteer....please add their information as well....after I have all of our returning volunteers in place, we will accommodate any new folks as best we can to coordinate with your schedule. Friends and Family of yours will have first shot a volunteer position.

PLEASE USE EMAIL AT THIS TIME!!! (For all responses, requests, and/or concerns!!!) We are excited to have all of you back in 2011!

Jeremy Hegna
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Hops

From Wikipedia, the free encyclopedia

Hops are the female flower clusters (commonly called seed cones or strobiles), of a hop species, *Humulus lupulus*. They are used primarily as a flavoring and stability agent in beer, to which they impart a bitter, tangy flavor, though hops are also used for various purposes in other beverages and herbal medicine. Hops were cultivated continuously around the 8th or 9th century AD in Bohemian gardens in the Hallertau district of Bavaria and other parts of Europe. However, the first documented use of hops in beer as a bittering agent is from the eleventh century. Prior to this period, brewers used a wide variety of bitter herbs and flowers. Dandelion, burdock root, marigold, horehound (the German word for horehound means "mountain hops"), ground ivy and heather were often used prior to the discovery of hops. Hops are used extensively in brewing today for their many purported benefits, including balancing the sweetness of the malt with bitterness, contributing a variety of desirable flavors and aromas, and having an antibiotic effect that favors the activity of brewer's yeast over less desirable microorganisms. Historically, it is believed that traditional herb combinations for ales were abandoned when it was noticed that ales made with hops were less prone to spoilage.

The hop plant is a vigorous climbing herbaceous perennial, usually trained to grow up strings in a field called a *hopfield*, *hop garden* or *hop yard* when grown commercially. Many different varieties of hops are grown by farmers around the world, with different types being used for particular styles of beer.

History

The first documented instance of hop cultivation was in 736, in the Hallertau region of present-day Germany, although the first mention of the use of hops in brewing in that country was 1079. Not until the thirteenth century in Germany did hops begin to start threatening the use of gruit for flavoring. In Britain, hopped beer was first imported from Holland around 1400; however, hops were condemned in 1519 as a "wicked and pernicious weed." In 1471, Norwich, England banned use of the plant in the brewing of beer, and not till 1524 were hops first grown in southeast England. It was another century before hop cultivation began in the present-day United States in 1629.

World production

Important production centers are the Hallertau Valley in Germany (which, in 2006, had more hop-growing area than any other country on Earth), and the Yakima (Washington) and Willamette (Oregon) valleys in the United States. The principal production centers in the UK are in Kent (which produces Kent Goldings hops) and Worcestershire. Essentially all of the harvested hops are used in beer making.

Methods












Hops are a climbing plant. They are trained up strings or wires which support the plants and allow them significantly greater growth with the same sunlight profile. Energy that would have been required to build structural cells is also freed for crop growth.

Male and female flowers of the hop plant develop on separate plants (dioecious). Because viable seeds are undesirable for brewing beer, only female plants are grown in hopfields which prevents pollination; female plants are propagated vegetatively or male plants are culled if plants are grown from seeds.

Until mechanization, the need for massed labor at harvest time meant hop-growing had a big social impact. For example, many of those hop picking in Kent, a hop region first mechanized in the 1960s, were Eastenders. For them, the annual migration meant not just money in the family pocket but a welcome break from the grime and smoke of London. Whole families would come down on special trains and live in hoppers' huts and gradients for most of September, even the smallest children helping in the fields.



tapproot

Hop producing country	Hop output in US Tons
 Germany	37,961
 United States	25,897
 China	11,658
 Czech Republic	8,632
 Poland	3,763
 Slovenia	2,798
 United Kingdom	1,866
 Spain	1,694
 Ukraine	1,624
 France	1,512
 New Zealand	992

In Kent, the numbers of hop-pickers who came down from the city meant that many growers issued their own currency to those doing the labor. In some cases, the coins issued, often adorned with fanciful hops images, were themselves quite beautiful. As the currency could in the main be spent only at the company store, this was effectively a truck system.

Sonoma County in California was, pre-mechanization, a major US producer of hops. As in other hop-growing regions, the labor-intensive harvesting work involved large numbers of migrant workers traveling from other parts of the state or elsewhere for the annual hop harvest. During the Great Depression, many workers were migrant laborers from Oklahoma and the surrounding region who had recently come to California. Others included locals, particularly older school children. Sometimes whole families would work in the harvest. The remnants of this significant hop industry are still noticeable in the form of old hop kilns that survive in Sonoma County. In part because of the hop industry's importance to the county, local Florian Dauenhauer of Santa Rosa, the seat of Sonoma County created one of the earliest and most significant hop-harvesting machines but ironically this mechanization helped destroy the local industry. It enabled large-scale mechanized production which moved to larger farms in other areas.

Brewing

Hops are dried in an oast house before they are used in the brewing process. Hop resins are composed of two main acids: alpha and beta acids.

Alpha acids have a mild antibiotic/bacteriostatic effect against Gram-positive bacteria, and favor the exclusive activity of brewing yeast in the fermentation of beer. Alpha acids are responsible for the bitter flavor in the beer.



Beta acids do not isomerize during the boil of wort, and have a negligible effect on beer taste. Instead they contribute to beer's bitter aroma, and high beta acid hop varieties are often added at the end of the wort boil for aroma. Beta acids may oxidize into compounds that can give beer off-flavors of rotten vegetables or cooked corn.

The effect of hops on the finished beer varies by type and use, though there are two main hop types: bittering and aroma. Bittering hops have higher concentrations of alpha acids, and are responsible for the large majority of the bitter flavor of a beer. European (so called "noble") hops typically average 5–9% alpha acids by weight, and the newer American species typically ranging from 8–19% aabw. Aroma hops usually have a lower concentration of alpha acids (~5%) and are the primary contributors of hop aroma and (non-bitter) flavor. Bittering hops are boiled for a longer period of time, typically 60–90 minutes, in order to maximize the isomerization of the alpha acids. They often have inferior aromatic properties, as the aromatic compounds evaporate off during the boil.

The degree of bitterness imparted by hops depends on the degree to which otherwise insoluble alpha acids (AAs) are isomerized during the boil, and the impact of a given amount of hops is specified in International Bitterness Units (IBUs). Unboiled hops are only mildly bitter. On the other hand, the (non-bitter) flavor and aroma of hops come from the essential oils, which evaporate during the boil.

Aroma hops are typically added to the wort later to prevent the evaporation of the essential oils, to impart “hop taste” (if during the final 10 minutes of boil) or “hop aroma” (if during the final 3 minutes, or less, of boil). Aroma hops are often added after the wort has cooled and while the beer ferments, a technique known as “dry hopping” which contributes to the hop aroma. The four major essential oils in hops are Myrcene, Humulene, Caryophyllene, and Farnesene which comprise about 60–80% of the essential oils for most hop varieties.

Today a substantial amount of “dual-use” hops are used as well. These have high concentrations of alpha acids and good aromatic properties. These can be added to the boil at any time, depending on the desired effect.

Flavors and aromas are described appreciatively using terms which include “grassy”, “floral”, “citrus”, “spicy”, “piney”, “lemony,” and “earthy”. Most of the common commercial lagers have fairly low hop influence, while true pilseners should have noticeable noble hop aroma and certain ales (particularly the highly-hopped style known as India Pale Ale, or IPA) can have high levels of bitterness. Undried or “wet” hops are sometimes used.

Hop varieties

Particular hop varieties are associated with beer regions and styles, for example pale lagers are usually brewed with European (often German and Austrian, since 1981 also Czech) noble hop varieties such as Saaz, Hallertau and Strissel Spalt. British ales use hop varieties such as Fuggles, Goldings and Bullion. North American beers use Cascade hops, Columbus hops, Centennial hops, Willamette hops and Amarillo hops to only name a few.

Noble hops



The term *noble hops* traditionally refer to four varieties of hop which are low in bitterness and high in aroma. They are the central European cultivars, Hallertau, Tettnanger, Spalt, and Saaz. They are each named for a specific region or city in which they were first grown or primarily grown. They contain high amounts of the hop oil humulene and low amounts of alpha acids cohumulone and adhumulone, as well as lower amounts of the harsher-tasting beta acids lupulone, colupulone, and adlupulone.

Their low relative bitterness but strong aromas are often distinguishing characteristics of European-style lager beer, such as Pilsener, Dunkel, and Oktoberfest/Märzen. In beer, they are considered aroma hops (as opposed to bittering hops); see Pilsner Urquell as a classic example of the Bohemian Pilsener style, which showcases Noble hops.

As with grapes, land where the hops were grown affects the hops' characteristics. Much as Dortmunder beer may only within the EU be labeled “Dortmunder” if it has been brewed in Dortmund, Noble hops may only officially be considered “Noble” if they were grown in the areas for which the hops varieties were named.

Some consider the English varieties Fuggle and East Kent Goldings to be noble. They are characterized through analysis as having an alpha:beta ratio of 1:1, low alpha-acid levels (2–5%) with a low cohumulone content, low myrcene in the hop oil, high humulene in the oil, a ratio of humulene:caryophyllene above three, and poor storability resulting in them being more prone to oxidation. In reality this means that they have a relatively consistent bittering potential as they age, due to beta-acid oxidation, and a flavor that improves as they age during periods of poor storage.

Hallertau or Hallertauer–The original German lager hop; named after Hallertau or Holledau region in central Bavaria. Due to susceptibility to crop disease, it was largely replaced by Hersbrucker in the 1970s and 1980s. (Alpha acid 3.5–5.5% / beta acid 3–4%)

Saaz–Noble hop used extensively in Bohemia to flavor pale Czech lagers such as Pilsner Urquell. Soft aroma and bitterness. (Alpha acid 3–4.5% /Beta acid 3–4.5%)

Spalt–Traditional German noble hop from the Spalter region south of Nuremberg. With a delicate, spicy aroma. (Alpha acid 4–5% / beta acid 4–5%)

Tettnang–Comes from Tettnang, a small town in southern Baden-Württemberg in Germany. The region produces significant quantities of hops, and ships them to breweries throughout the world. Noble German dual use hop used in European pale lagers, sometimes with Hallertau. Soft bitterness. (Alpha Acid 3.5–5.5% / Beta Acid 3.5–5.5%)

Other uses

Beverages

The only major commercial use for hops is in beer, although hops are also an ingredient in Julmust, a carbonated beverage similar to soda that is popular in Sweden during December, as well as Malta, a Latin American soft drink.

Medicinal

Hops are also used in herbal medicine in a way similar to valerian, as a treatment for anxiety, restlessness, and insomnia. A pillow filled with hops is a popular folk remedy for sleeplessness. Hops may be used alone, but more frequently they are combined with other herbs, such as valerian. The relaxing effect of hops may be due, in part, to the specific chemical component dimethylvinyl carbinol. Hops tend to be unstable when exposed to light or air and lose their potency after a few months' storage. Tom's of Maine deodorant uses hops for its antibacterial activity.

Toxicity

Dermatitis sometimes results from harvesting hops. Although few cases require medical treatment, it is estimated that 3% of the workers suffer some type of skin lesions on the face, hands, and legs. Pet owners should beware that hops are toxic to dogs, possibly leading to death.



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The Great Northern Brewers Club and the American Homebrewers Association remind you to.....Savor the Flavor Responsibly



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Great Northern Brewers Club
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3705 Arctic Boulevard
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**NEXT MEETING: GNBC Holiday TO-GA Party
6:30 at the Goose**