



Volume 8, Issue 1/Winter 2009

Malt: not just for beer

By **Cargill Malt**

We all know that malt is not just used to brew beer, but also is the main ingredient, if not the only ingredient, for a variety of whiskeys produced around the world.

The bourbon country of Kentucky and the sour mash whiskeys of Tennessee currently account for the majority of the Distillers Malt sold in the U.S. However, craft distillers are popping up around the country as the demand for locally distilled higher-end whiskeys increase.

What are the differences between the pale brewers malt we know, and the malt our cousins are using down south?

To begin to explain the differences we will first compare some of the analytical

Turn to pages 6-7 for more news on malt and Cargill Malt.

parameters, talk about typical grain bills for American whiskeys, and discuss the different needs of the master distiller as compared to the master brewer.

Analytically they are clearly different animals. (Please refer to the graph that accompanies this article on page 6).

Right from the beginning the moisture difference is noticeable. This is related to the fact that the biggest challenge the

See "The Master Distiller," page 6

The White Labs and yeast pages

Find these stories on pages 2-3

* The mostly White Labs team of Beer for Boobs (the team logo is at right) surpassed its fundraising goal in the nationwide effort to raise money for cancer research.



* Brew Day: White Labs employees on: Steeping, split batches and pizza, not necessarily in that order.

* Brewing Down Under gains momentum

Hopunion LLC

New and not-so-new faces



* To connect people with faces at Hopunion, please turn to page 4.

Try Yeastman during the CBC

At the Craft Brewers Conference in Chicago in April, White Labs staff members will show brewers how to use the company's new online ordering system, Yeastman.

The system allows brewers to order custom size batches of yeast in real time. During the online session, the system will show brewers when their yeast will be ready and at what cost. If they need the yeast sooner, they can also select similar strains that are in a later stage of production. The system tracks the production schedule at White Labs and can predict when the yeast will complete its growth cycle and clear QC.

Yeastman also allows brewers to adjust their individual accounts, such as adding a new shipping address or changing contact information. One of the goals of the system



was to merge the Internet with tracking technology to make ordering yeast informative, easy and quick.

Come by the White Labs booth to learn more about the Yeastman system and receive a special offer to use it for the first time.

More details will be announced at the festival.

Meanwhile, the system can be used at any time, even before the festival begins. The address is www.yeastman.com. Or visit www.whitelabs.com for more information. To learn more about the Craft Beer Festival, visit www.beertown.org.

Style Matters: Tips for making English style IPAs

In each issue, CBQ spotlights a particular beer style and provides tips from an ingredient and fermentation perspective. In this issue, we look at English-style IPAs.

Hop Notes:

The English style IPA was traditionally brewed to withstand the long voyages from England to India. Its distinctive recipe required higher alcohol content

and an extreme amount of hops. This combination proved crucial for the beer to withstand many months at sea and still remain a desirable beverage. The alpha acids naturally found in hops have a positive effect on yeast during fermentation and provide a mild antibiotic defense against Gram-positive bacteria. The high alcohol content and increased hop usage provided the preservation qualities which gave birth to the style known as IPA.

Historically, bitterness levels could exceed 150 IBU's.

According to BJCP style guidelines, bitterness levels typically range between 40-60 IBU's. Fuggle, East Kent Golding, US Golding, German Hallertau or Styrian Golding are commonly used hops. The hops you select should complement the English malt character notably found in this classic style. Some commercial examples include: Brooklyn East IPA, Fuller's

See "Style Matters," page 5

Yeast ranchers raise money in Beer for Boobs walk

By **Lisa White**

Zero to 60 miles in 3 days!

We did it! The walk is over, the hundreds of pink tents are gone, the muscle aches have passed and the blisters have healed, but the experience of this walk will be with us always. Our team was privileged to be a part of an incredible experience.

We walked the many steps around San Diego for those fighting the battle against breast cancer, for those who have conquered the disease, and for those who have fought and lost. Our team raised over \$25,000.

Together with about 5,000 others in San Diego, we raised over 11.3 million dollars!

The Susan G. Komen 3-day walk allowed us to bond as a team, as women, and as a community.

We were bombarded with emotion at every turn.

Many of the 5,000 participants took turns holding banner signs during the walk to represent those who we were all walking for — My Grandmother, My Aunt, My Best Friend, etc.

We were like little girls when children were handing us stickers at the cheering stations.

We appreciated the pink lemonade, red vines, cookies and milk, and even grilled Ahi tuna that supporters made for us during our long daily journey. There were even a couple of homes in the Mission Beach area that were giving out beer and wine shots.

Our eyes welled up with tears when the bald ladies in evening dresses, who had recently had chemo, sincerely thanked us for walking for them.

The sweep vans that took you to the next pit stop or medical tent were outfit-

ted with volunteers in various themes. I took one that had Lucy and Ethyl as drivers. They really played the part too. So many people in cars honked and waved with support. It was a different kind of San Diego, and we loved it!

Days before the walk, most of us would have told you that we would never do this torturous walk and training again. Now, we all crave the feeling we had out there.

Beer for Boobs will be back in 2009. Thank you to those who donated

money, and those who donated well wishes. Special thanks to my teammates. We pulled each other through those 60 miles.

Great job ladies! Beer for Boobs team 2008 included: Lisa White, Lara Wenner, Yvonne Angel, Ashley Paulsworth, JoAnne Carilli-Stevenson, Meg Falbo, Victoria Mayes, and Stefanie Wacker.

Lisa White was captain of the 2008 Beer for Boobs team and serves as vice president of White Labs.

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Beer for boobs

In these photos, Beer for Boobs members take part in their first annual event in the San Diego area. Look for a return performance in 2009.



From the Lab by Neva Parker: On hold for now

Welcome Ada Channy Parker

Neva Parker, lab manager of White Labs, is out on maternity leave after the birth of her first child, Ada Channy Parker.

Ada was born Jan. 16 and came in at 8 pounds and 14 ounces.

Parker's column, From the Lab, should return when she comes back to work. Meanwhile enjoy a few photos of the new baby.

Good wishes to Ada and her parents Neva and Glen Parker.



From the Lab
—
Neva Parker



Down Under, good beer is making many inroads

Editor's Note: This article also appeared in the *White Labs Customer Club* newsletter. While it relates to what's happening in the homebrewing community in Australia, the rising interest in homebrew *Down Under* is accompanied by a growth in both quantity and quality of craft beer in Australia. That is the reason this article is relevant to brewers everywhere.

A recent trip to Australia shows me that homebrewers there are eager to learn from their North American counterparts.

Besides the rise in business for higher-end ingredients such as fresh yeast, signs of a rising homebrewing movement in Australia abound. Indeed it was the whole reason we were there. Organizers of the inaugural Australian National Homebrew Conference were inspired to start the event after attending the American version, the National Homebrewing Conference. The Australians have many goals, including raising the quality of homebrew.

The event in late October, 2008, near Melbourne featured tours of craft breweries, numerous speakers, including myself, and a gala dinner and awards ceremony to celebrate the best of Australian homebrew.

The Australians are very keen on making more challenging beers, big hoppy beers and high gravity beers, and these interests were a part of many of the talks. My talk was titled "Yeast considerations for high gravity wort," and this is how the conference described it: "Homebrewers love to make high gravity beers. The problem is, yeast don't like to. High gravity beers are stressful for yeast, due to higher sugar concentrations, less available oxygen, and higher alcohol concentrations. This seminar will discuss how to lower the damage on yeast, and improve the



Letter from
the President

Chris White

flavor of your beer. The 3 main controls homebrews have are: pitching rate, dissolved oxygen, and fermentation temperature. Learn how to optimize these conditions, and your high gravity beer will taste best."

I gave a similar talk during the last American Homebrewing Conference near Cincinnati. However, my physical condition was much different from when I spoke in the States. Unfortunately, at the Australian conference, I had an eye infection and my participation during the conference was limited. However, I did give my talk, and I am thankful to a homebrewer who went to a pharmacy and got me an eye patch. Given the timing of the conference close to Halloween, I joked that I was dressing as a pirate. By the way, I am feeling much better now.

Two featured speakers were John Palmer and Jamil Zainasheff, who are prominent American homebrewing authorities and authors. While I wasn't able to attend all the talks I wanted to because of my health, I did attend Jamil's talk and I enjoyed his list of "don'ts" for homebrewers. Here are a few that I recall:

– Don't try to brew like a pro. You have different brewing conditions, and smaller batches, and you need to keep these factors in mind.

– Don't transfer to a secondary. The more you transfer, the more you can introduce contamination and oxidants into your beer. Transfer to the secondary only when fermentation is done, Jamil said, which I think is wise.

– Don't rely on the recipe. Good recipes do not ensure good beer.

– Don't use stainless steel fermenters. He likes simple glass carboys, and I think he has a good point.

– Don't drink too much when brewing. This brought a lot of laughter from the audience, but he has a great point. When I was at the peak of my homebrewing – when I was regularly making 15 gallon batches with Yuseff Cherney, who would go on to become head brewer at Ballast Point Brewery – we did not drink much. When you become serious about the hobby, drinking in small quantities helps ensure more consistent, better beer.

– Don't ignore fermentation. Of course I liked this tip the best. This is where some of beer's most important and prominent flavors are produced, and he talked about how people could improve their fermentations. One thing he emphasized was taking measures to control fermentation temperature.

– This is just a snapshot of what Jamil talked about, but it was a highlight of an altogether very good conference. Hopefully next year I will be able to attend more of the show – without an eye patch.

Chris White is President of White Labs Inc. He has a Ph.D in biochemistry. Feel free to write him at cwhite@whitelabs.com about this column.

Brew Day: Lab people learn to make beer

Editor's Note: White Labs Microbiologist Ashley Paulsworth describes how she and fellow employees of the White Labs laboratory spent a recent weekend day making homebrew at lab manager Neva Parker's house.

Mission: White Labs Brew Day

Location: Neva Parker's backyard

Target: A well balanced red ale with a little sweetness.

We're standing outside in the warm California sun. It's a Friday morning and Sharon, Alyssa and I are waiting in Neva's backyard. Shielding our eyes, we look around at the items laid out in front of us; a few buckets, a giant silver pot, something that looks like rabbit food and ... a bag of cereal?

If this brings memories of your first day of home brewing, I've gotten the message across. The scene above describes our most recent brew day at our manager's house, making it my second, but certainly most involved. Over the past year, we've acquired some new talent in the lab and,

See "Brew Day," page 8



Brew day for White Labs employees:

Right to left are Ashley Paulsworth, Alyssa Barker and Sharon Fernandez.

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Connect names with faces at Hopunion LLC

By Jessica Dickinson

Ever wonder whose voice that is on the other side of that telephone line? Here at Hopunion, LLC we have made some new additions to our office team, and would like to reintroduce our staff to you. Take a quick gander at the photos and put the faces to the voices.

Below we list the person's name, the photograph number and a quote from each one.

Jennifer Stevens (1)

Quote - "Well, here I come and I'm

so not scared, Got my pedal to the metal, got my hands in the air"

Nadia Urvina (2)

Quote - "You're killing me smalls!"

Jo Ann Waters (3)

Quote - "It's my way or the high-way."

Jessica Dickinson (4)

Quote - "I'm starting to see contract revisions in my sleep!"

Debbie Byrne (5)

Quote - "No drinking for me, I'm pregnant and loving it!"

Joanne Scully (6)

Quote - "Thanks for the update!"

Gerri Harrison (7)

Quote - "You're not supposed to walk into your grave perfectly preserved, made up, and hair in place! No! Slide in sideways, body completely used up, martini in one hand, chocolate bar in the other

screaming, 'WOW! What a ride!'"

Lisa Dehnhoff (8)

Quote - "As real ... As it gets"

Blake Cruzen (9)

Quote - "You got some numbers to back that up with?"

Jesse Umbarger (10)

Quote - "You can't be a real country unless you have good beer and an airline - it helps if you have some kind of football team, or some nuclear weapons, but at the very least you need good beer with lots of hops."



9 — Blake Cruzen, Controller

4 — Jessica Dickinson, CBS Coordinator

6 — Joanne Scully, CBS Coordinator

10 — Jesse Umbarger, Operations Manager

3 — Jo Ann Waters, A/RA/P

7 — Gerri Harrison, CBS Coordinator

2 — Nadia Urvina, CBS Coordinator

8 — Lisa Dehnhoff, CBS Coordinator

1 — Jennifer Stevens, Office Manager

5 — Debbie Byrne, CBS Coordinator

Style Matters

From Page 1



IPA, and Samuel Smith's India Ale. To view more varieties of hops for your brewing needs please visit our website at: www.Hopunion.com.

—Jesse

Umbarger, Hopunion LLC

Yeast and Fermentation Notes:

The best yeast strains for this style are the ones that will balance hops and malt. Some breweries use WLP001 California Ale Yeast, and while this works well in many beers, including this one, it does emphasize hops more than malt. So if you are looking for the ideal strains, I would suggest the following, most of which originated in England:

(Indeed, the BJCP specifically mentions that beer made to this style should feature characteristics related to the use of English hops, malt and yeast, and that the English yeast can give a fruity or sulfury/minerally profile.)

WLP002 English Ale Yeast, WLP004 Irish Ale Yeast, WLP005 British Ale Yeast, WLP006 Bedford British Ale Yeast, WLP007 Dry English Ale Yeast, WLP013 London Ale Yeast, WLP017 Whitbread Ale Yeast, WLP022 Essex Ale Yeast, WLP023 Burton Ale Yeast, WLP026 Premium Bitter Ale Yeast, and WLP041 Pacific Ale Yeast.

Since this list mostly includes English strains, you may want to consider top cropping. Today we usually use conical bottom fermentors that aid in cleaning and yeast collection. While these vessels help in yeast collection, the quality of yeast that is



Comparisons of various IPA styles, using data from the Beer Judge Certification Program (BJCP) style guidelines	
English IPA	
Vital Statistics:	
OG: 1.050 – 1.075	
IBUs: 40 – 60	FG: 1.010 – 1.018
SRM: 8 – 14	ABV: 5 – 7.5%
American IPA	
Vital Statistics:	
OG: 1.056 – 1.075	
IBUs: 40 – 70	FG: 1.010 – 1.018
SRM: 6 – 15	ABV: 5.5 – 7.5%
Imperial IPA	
Vital Statistics:	
OG: 1.070 – 1.090	
IBUs: 60 – 120	FG: 1.010 – 1.020
SRM: 8 – 15	ABV: 7.5 – 10%

collected is not as good as from top cropping. Top cropped yeast rises at a particular time in the fermentation, has a high viability, and is relatively free from trub. When yeast is forced to the bottom of a conical fermentor, it mixes with dead yeast, trub, and bacteria. So since you are already using strains accustomed to top cropping, and if you have the available equipment, you should consider this option.

Before entering your English style IPA in a festival, you may consider testing your beers for such factors as total VDK, or diacetyl (officially, slight amounts of diacetyl are permissible for English style

IPAs). Our own Big QC Day, held each year in February, is timed to occur before most major beer festivals so that brewers can rely not just on taste but also on numbers when deciding what beers to enter in each style.

—Mike White, White Labs

Malt Notes: The English IPA is, not surprisingly, the mother style from which our American IPA developed. Strong in bitterness, with a pronounced hop character, heft from alcohol, and noticeable ale yeast fermentation characteristics, these styles differ in the subtleties. English IPA tends to be the more malt balanced, am-

ber colored, mildly bittered of the two. Specs for

English IPA have an OG 12.5-16 Plato, ABW 4-6%, and IBU 35-50.

When formulating the grain bill for this style we would suggest using a more deeply flavored base malt for this more malt forward beer. On the domestic side Cargill Special Pale is the obvious starting point. Longer, hotter kilning allows for more flavors to develop resulting in a richer beer. An English malt would also be an excellent choice, and we have two to recommend. Pauls Pale Ale malt is used by many brewers in the United Kingdom in IPAs and Pale Ales. If a truly traditional interpretation of the style is your goal, floor malted Maris Otter would be recommended. Warminster Maltings, in the south of England, floor malts Maris Otter in this time-honored way.

After the base malt has been selected a specialty malt will need to be used to add color, and hopefully more depth of flavor. One direction would be to add a mid range caramel malt. Pauls Light or Medium Crystal will add a caramel note and the color needed, without the roast notes of a darker crystal. Although roasted malts can be used, they often add burnt flavors which compete with the hop flavors important in this style. Another choice would be to use an Amber Malt like Pauls Amber, or Dingemans Biscuit. Amber malts will add a toasted, bready, full flavor to beer which can marry well with the hops. A third, and very good option, would be to use both Caramel and Amber malts in the grain bill.

Overall, when formulating the grain bill we would keep in mind an excellent English IPA is a balance of malt and hops where neither overshadows the other.

—Cargill Malt



Import hops update from R. Woodall

By Ralph Woodall
Hopunion CBS LLC

The 2008 crop of import hops is now being delivered to Hopunion, LLC for contracts and open sales.

As many of you know, Hopunion CBS LLC sells numerous import varieties that have US counterparts. As an example: GR Hallertau, CZ Saaz, GR Perle, GR Magnum, and GR Northern Brewer.

The GR Tradition is also like Hallertau with an on average higher alpha. We also carry some unique varieties such as GR Select, GR Spalt, and GR Hersbrucker. Other varieties such as Styrian Bobek, are similar to Fuggle and Styrian Golding. The Styrian Aurora is similar to both

German and US Perle varieties, and can be very helpful in covering any shortages in the US supply.

The UK hops, although not as well supplied are also coming in so UK Fuggle as well as the UK Whitbread Golding variety are arriving in for contracts and some open sales. However if shortages happen, we do have the US variety counterparts to help fill in your supply needs.

The New Zealand 2008 crop is in and we have Organic NZ Hallertau, Organic NZ Pacific Gem, and NZ Pacific Hallertau available. Plan to visit our website at www.hopunion.com and view our hop variety sheets for general information on alpha, beta, and aromatic levels.

Brewers Assoc. News

The Brewers Association has announced that small, independent craft brewers are gaining alcohol market share because of a shift toward full flavor beer and increased support for local breweries.

From 2007 to 2008, estimated sales by craft brewers jumped 5.8 percent by volume and 10.5 percent in dollars.

Overall share of the beer category from craft brewers was 4 percent of production and 6.3 percent of retail sales. More than 1 million new barrels of beer were sold in 2008, and close to half of those barrels were beer from craft brewers.

The Master Distiller

From Page 1

maltster has with producing this type of malt is to achieve the high DP and Alpha levels the distiller demands. Therefore while kilning, lower heats are used to help preserve (denature less) as much of the enzyme that was produced during germination, resulting in the higher moisture.

Extract levels also are lower in the distiller malt. Not only will a 6-row inherently have less extract, but also due to the greater modification (or growth) during germination, the kernel will utilize more of its starch stores, lowering the extract.

The American whiskey distiller does not have the same extract concern as the brewer since the majority of his extract is coming from other grains, namely corn and rye. A typical grain bill for an American whiskey might be 78% corn, 10% rye, and 12% malted barley. In fact, many times the smaller fractions of the barley are used to make distillers malt, which further accounts for the difference we see in extract and Bushel Weight.

Kernel size

Kernel size also relates directly to the protein difference we see. The smaller kernels have less extract, but typically are higher in protein. The higher protein barley has a greater enzyme potential since after all, enzymes are made of proteins.

Unlike brewers, who prefer lower protein barley to help avoid the haze-producing proteins in beer, distillation resolves any haze issues from using high-protein barley.

There are similarities between brewing and distilling since both create a mash and ferment to create a beer, or in a distiller's terms, a wash.

malt type	Moist %	FExt db %	Color ASBC	Total Malt Prot %	Sol. Prot %	S/T	D.P.	Alpha	pH	Bu Wt. Lbs/Bu
2-row Pale	3.8	81.6	2.26	11.11	4.99	44.9	150	58.4	6	40.5
6-row Distillers	6.1	77.8	3.19	13.68	8.85	64.7	275	94.2	5.43	37

However, that fermentation takes place under different conditions. While a brewer creates a sterile wort by boiling in the kettle and fermentation is in a hopefully sterile sealed tank, the distiller doesn't boil prior to fermenting.

Fermenting in an open tank

Distillation later in the process will create a sterile product, and fermentation takes place in an open tank. Therefore the distiller is concerned with competing bacteria affecting his alcohol yield. To help limit the bacteria load in the mash, the maltster applies a solution of Sodium Bisulfite to the malt first, and then Phosphoric Acid right before the batch goes to kiln. The reaction causes the pH on the kernel surface to drop enough, limiting the bacteria count, and many distillers have maximum levels that they like to be below.

As mentioned earlier though, the enzyme levels, both DP and Alpha, are the biggest difference between the two types of malt. With the large amounts of non-enzymatic grains in an American whiskey grain bill, you easily see why the distiller is very interested in enzyme levels.

Also, briefly touched on, was a couple ways the maltster manipulates his kilning regiment to maximize enzyme, while pushing modification during germination to achieve those levels.

To help the modification in germination the use of Gibberalic Acid is sometimes used. This natural plant growth hormone is applied to the kernel via a light mist-

Below: Typical Malt Analysis



ing spray during the first day of germination to give the kernel a jump-start accelerating growth and enzyme production.

Different malts for different whiskeys

Therefore, the type of whiskey dictates what malt gets used. For the aspiring craft distiller who wants to make a bourbon or American whiskey that utilizes large amounts of corn, rye and/or wheat, you want to use a high enzymatic distiller's malt.

If you want to make an all-malt whiskey, however, you probably want to look at some of the brewer's malts, which are very close enzymatically and have similar extract levels as some of the English distiller malts.

Ask the Maltster: Questions on using Cargill 2-row with year change

Question: What can I expect from my Cargill 2-row with the crop year change? When will I start getting new crop malt at my brewery?

Answer: This is a very good question to be asking at this time of year. The 2-row you are using has a very significant impact on the efficiency of your process, your beer flavor, and overall beer quality.

Much like hops, barley is an agronomic product that has year-to-year fluctuations dictated primarily by the weather conditions during the growing and harvest season.

The great news is that the areas in Northern Canada where we source most of our 2-row had excellent growing conditions this year, and we are seeing very nice analytical results in the finished prod-

uct.

The most noticeable change in the malt will be the assortment. The malt is quite plump this year due to ideal weather mid to late summer when the kernels are filling. Definitely monitor your grind during the crop year transition process. You will probably have to open your mill gap in order to avoid creating excessive flour.

Protein levels should be in the high 10's this year which is historically quite low. While this may ease your burden in filtration somewhat, no adjustments to process should be necessary based on this factor alone.

With high plump and low protein comes high extract. You can expect to use less malt in 2009 as a result. Consistency of kernel size and modification may also improve your brewhouse efficiency which will enhance

this effect. Simply adjust your grist weight to continue to meet your target brewhouse parameters.

Beta Glucan and DMS precursor will both continue to be very low.

Another change for our 2009 2-row is our blend composition. We continue to use Metcalf as the backbone of our blend due to its excellent flavor and brewhouse performance characteristics. What we are changing after extensive testing is our secondary variety from Kendal to Copeland.

Kendal is a variety that is quite similar to Metcalf in flavor. Its brewhouse performance characteristics aren't quite as exceptional as Metcalf, but it does tend to be higher in extract. Copeland on the other hand does have more flavor than both Metcalf and Kendal, and also has lower wort color at similar protein levels and

processing parameters. Brewhouse performance is similar to that of Kendal.

The net result of this change to the blend will be malt that is lighter in color and has enhanced flavor. A win-win for most brewing applications since the flexibility to enhance color with specialties exists, and the lighter 2-row can make paler lagers etc. when used on its own. Initial brewing results have been very positive to date.

We have been malting 2008 crop for the last 1-2 months so you should be seeing it at your brewery any time now. We have already been shipping bulk 2-row from 2008 crop. Bag malt tends to follow shortly behind the bulk.

So happy brewing in 2009. We feel confident that you will be very pleased with the exceptional malt from crop year 2008.

Crop report 2008: Final U.S. and Canadian overview

Canadian Malting Barley Information

Summary of Crop 2008-09

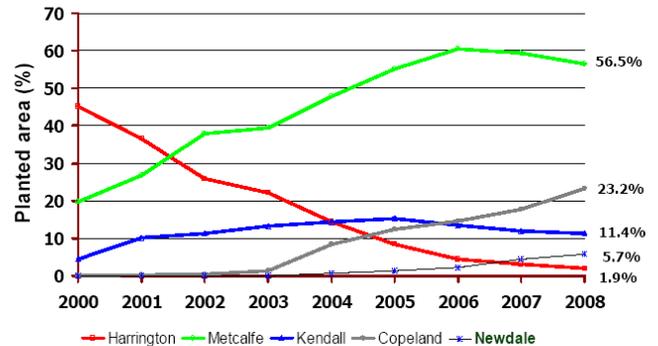
- Some late harvested barley failed to make malting quality.
- Overall, yields and quality are above average this year.
- Plumprness is greater than average, protein is lower than average and staining is moderate.
- Above average yields (~61.3 bu/acre) and limited export barley sales will put the Carry-over back to historical levels.

Estimate for Crop 2009-10

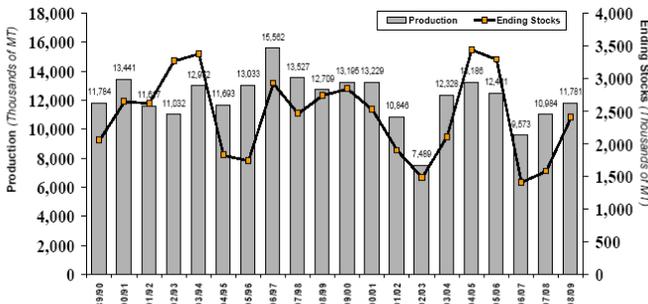
- Wheat midge pressure heavy this year, will be positive for barley acres for 2009-10.
- Crop rotations may also be positive for barley acres. There is substantial canola stubble from 2008-09 crop year.
- High input prices, such as fertilizer, will put pressure on other high input commodities (such as canola).
- Barley market uncertainty may continue to discourage Growers from growing malting barley; unless there is a solution.
- Competition for acres will continue to be strong.

Barley Production Trends (W. Canada)

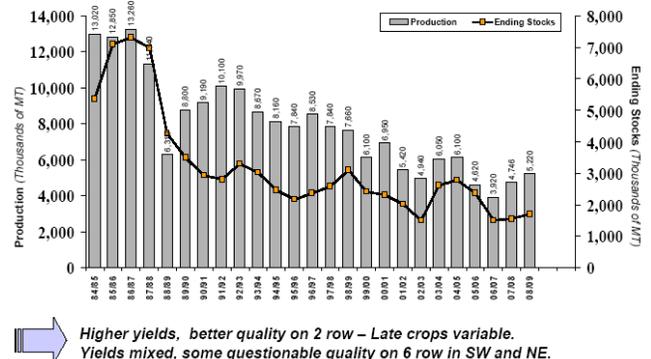
2-Row: Planted Acres 2000-2008 (CWB variety survey)



Canada Barley Production & Ending Stocks

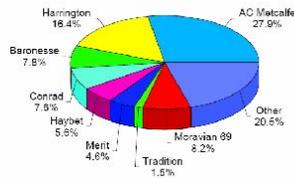


USA Barley Production and Ending Stocks



2008 WEST BARLEY VARIETIES

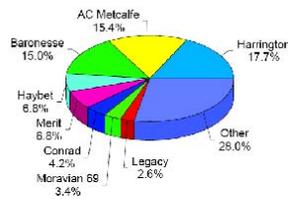
Idaho, Montana, Washington & Wyoming



Western U.S.A. Varieties – '08 vs. '07

2007 WEST BARLEY VARIETIES

Idaho, Montana, Washington & Wyoming



- Metcalfe increased 12%..
- Harrington acres declining/steady.
- MV 69 acres are increasing 5%.
- Conrad acres increasing 3%.

U.S.A. Malting Barley Information – 2008 Crop

North Dakota 6-row areas – Mixed results.

- Acceptance: Slipped in some areas & improved in others.
- Yields/quality poor in SW part of state.
- East/East Central – yields/quality better than expected. 100 bpa.
- Some sprout/chit issues – 2 weeks of rain early on in harvest.
- USDA increased planted acres 150m & bumped yield from 52 to 56 bpa in N.Dak.
- Resulted in 8 mln bu more than 2007 production.

Western 2-row production areas – Mixed results.

- Early harvest was excellent. Yields/Quality.
- Last 35% of crop was delayed by rain/cold weather.
- Some issues on chit, frost, weathering.
- Montana yields were much better than last year.
- Idaho has struggled with tail-end of harvest in NE corner.



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Attention brewer

Craft Beer Quarterly

The Back Page

JoAnne moves to Lonza

JoAnne Carilli-Stevenson, longtime sales and marketing manager for White Labs, resigned in late 2008 to take a job outside the beer and alcohol field for the first time in many years.

Carilli-Stevenson joined Lonza Inc, a Swiss biotechnology firm. Her title is Business Development Manager, Custom Manufacturing.

(In the photo above, JoAnne is with brewing friends and others, including Chris White, at the 2006 Great American Beer Festival).

"I am working with speciality fermen-



tation projects for food ingredients, nutrition, cosmetics and environmental applications," she told CBQ. "Basically all non-pharmaceutical applications."

She continues to maintain ties to beverage fermentations with her personal marketing and consulting firm, Aspengold Marketing.

Everyone at White Labs wishes her good luck in her new career path. Before White Labs, JoAnne worked for the Brewers Association.

She can be reached at aspengold1@comcast.net.

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Brew Day

as avid beer drinkers and yeast lovers, we decided to get down and dirty and conduct some real homebrewin' in the hopes that it will give us a better understanding of the job you do everyday.

Here in the lab, we have a perfectly controlled environment which allows us to run trials and experiments on the beer you send us and the yeast we produce for you. For us, brew day is an opportunity to look at the process from your perspective and give brewing a try first-hand. At White Labs, we conduct micro-fermentations, and perform other selective tests on our yeast to make sure it is optimal for brewing. However, a day in the field sheds invaluable insight on the difficulties and realities of brewing that can sometimes be hard to translate to someone who doesn't have brewing experience. In an effort to provide our customers with the best technical advice, we thought it best to get out there and brew!

We started simple, using a malt extract recipe and began our day with a little steeping.

Because we're scientists, we relied on the most precise of instruments to keep track of time, a small green pepper timer. We wanted to be sure we got the recipe just right and, although we got in a quick game of foosball, you can bet our attention was always turned towards the kettle, that is, until the pizza came. (*Hint: White Labs women love pizza*).

Since we were using malt extract, we had Servomyces on hand to ensure a healthy brew. Speaking of brew, what's a good brew day without some good beer? Lucky for us we were able to indulge in a little AleSmith Nautical Nut Brown and Ballast Point Calico during the downtime.

Working at White Labs, with our wide range of yeast strains, gave us the ability to try a split batch. By using

two different yeasts from our Platinum Homebrew line, we should get really different flavor profiles, despite using the exact same recipe otherwise. In doing this, we will be able to give detailed information on just how much each yeast affected the flavor profile of the beer. This time, we chose two of our newer strains that you may not have used before: WLP006 Bedford British is highlighted by its ester production, while WLP072 French Ale allows more of the malt flavor to shine through and won't have the same fruitiness as WLP006. Don't worry, when these brews are finished fermenting we'll be sure to let you know how (good) they taste.

Overall, Brew Day was quite a success and we can't wait to share our next one! Try out our recipe and tell us what you think! To read the recipe, turn to www.whitelabs.com and follow the link under news to Ashley's report.

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