The OVHA Tap

Vol 12 No. 3

March 2008

Meeting Wednesday, 7:00 pm Mar. 26th at Germania Mannerchor

Featured Beer: Lager

Upcoming events

Big Brew Day

We will be hosting Big Brew Day again at Germania on May 3rd. Recipies will be available by March 31st. This should be a fun year, as we all know that hops are in short supply and very limited selection for most of us (unless you had a supply contract). Bring your brewing stuff, this is a public demonstration. We will probably brew six beers (three full mash, three from extract).

Atria Assisted Living Demonstration

We still haven't managed to get our demonstration at Atria done, hopefully we can find a weekend sometime this Spring!

National Homebrew Meeting

June 19th, 20th, and 21st. Details later.

Indiana State Fair Homebrew Competition

Submissions for the Indiana State Cup must be in by late June. Save some of your best for this -- we've had several members place well in the past. Exact dates when available.

WestSide Sportsman's Club Demonstration

We will be doing another demonstration at the Sportsman's Club Barbeque competition this year. This event was quite a blast last year. Plan on bringing a keg or two of brew to dispense! Should be quite a bit of excellent barbeque circulating late in the afternoon as well. Exact dates when announced.

Brewer's Musings

There are a number of ways to introduce yeast into wort to produce beer, the easiest these days is to simply empty a package of dry yeast into a 5 gallon batch of wort. However, there are a few drawbacks to this procedure: there are a rather limited number of yeast cells in a packet of dry yeast, as many (or most, in old packets) are dead and will contribute nothing but off flavors. The resulting low numbers of live yeast cells will result in slow frementation and resultant danger of spoilage and off flavors as the pH drop and alcohol content rise are delayed, to say nothing of the aggrevation of a three or four week fermentation. On top of that, the lower reproduction of lager yeasts, even in well aerated worts, will result in sluggish fermentation and even longer primary fermentation.

To avoid the under-pitching problem (not adding enough yeast), but starting with fresh yeast, one can use that packet of dry yeast to make a starter instead. This can be as simple as taking



Meeting Schedule 2008

March 26th 7:00 pm at Germania

April 30th 7:00 pm at Germania

May 28th 7:00 pm at Germania

Beer Evaluation Schedule

January: Mystery/End of Year

February: Lager

March: Porter/Stout

April: Pale Ale/ IPA

Meeting Subject Schedule

January: Kegging

February: Beer Defects

March: Yeast Starters

April: Water and Beer Brewing

12. PORTER

12A. Brown Porter

Aroma: Malt aroma with mild roastiness should be evident, and may have a chocolaty quality. May also show some non-roasted malt character in support (caramelly, grainy, bready, nutty, toffee-like and/or sweet). English hop aroma moderate to none. Fruity esters moderate to none.

Appearance: Light brown to dark brown in color, often with ruby highlights when held up to light. Good clarity, although may approach being opaque. Moderate off-white to light tan head with good to fair retention.

Flavor: Malt flavor includes a mild to moderate roastiness (frequently with a chocolate character) and often a significant caramel, nutty, and/or toffee character. May have other secondary flavors such as coffee, licorice, biscuits or toast in support. Should not have a significant black malt character (acrid, burnt, or harsh roasted flavors), although small amounts may contribute a bitter chocolate complexity. English hop flavor moderate to none. Medium-low to medium hop bitterness will vary the balance from slightly malty to slightly bitter. Usually fairly well attenuated, although somewhat sweet versions exist. Diacetyl should be moderately low to none. Moderate to low fruity esters.

Mouthfeel: Medium-light to medium body. Moderately low to moderately high carbonation. Overall Impression: A fairly substantial English dark ale with restrained roasty characteristics. History: Originating in England, porter evolved from a blend of beers or gyles known as "Entire." A precursor to stout. Said to have been favored by porters and other physical laborers.

Comments: Differs from a robust porter in that it usually has softer, sweeter and more caramelly flavors, lower gravities, and usually less alcohol. More substance and roast than a brown ale. Higher in gravity than a dark mild. Some versions are fermented with lager yeast. Balance tends toward malt more than hops. Usually has an "English" character. Historical versions with Brettanomyces, sourness, or smokiness should be entered in the Specialty Beer category (23).

Ingredients: English ingredients are most common. May contain several malts, including chocolate and/or other dark roasted malts and caramel-type malts. Historical versions would use a significant amount of brown malt. Usually does not contain large amounts of black patent malt or roasted barley. English hops are most common, but are usually subdued. London or Dublin-type water (moderate carbonate hardness) is traditional. English or Irish ale yeast, or occasionally lager yeast, is used. May contain a moderate amount of adjuncts (sugars, maize, molasses, treacle, etc.).

Vital Statistics:		OG:	1.040 - 1.052
IBUs:	18 - 35	FG:	1.008 - 1.014
SRM:	20 - 30	ABV:	4 - 5.4%

Commercial Examples: Fuller's London Porter, Samuel Smith Taddy Porter, Burton Bridge Burton Porter, RCH Old Slug Porter, Nethergate Old Growler Porter, Hambleton Nightmare Porter, Harvey's Tom Paine Original Old Porter, Salopian Entire Butt English Porter, St. Peters Old-Style Porter, Shepherd Neame Original Porter, Flag Porter, Wasatch Polygamy Porter

12B. Robust Porter

Aroma: Roasty aroma (often with a lightly burnt, black malt character) should be noticeable and may be moderately strong. Optionally may also show some additional malt character in support (grainy, bready, toffee-like, caramelly, chocolate, coffee, rich, and/or sweet). Hop aroma low to high (US or UK varieties). Some American versions may be dry-hopped. Fruity esters are moderate to none. Diacetyl low to none.

Appearance: Medium brown to very dark brown, often with ruby- or garnet-like highlights. Can approach black in color. Clarity may be difficult to discern in such a dark beer, but when not opaque will be clear (particularly when held up to the light). Full, tan-colored head with moderately good head retention.

Flavor: Moderately strong malt flavor usually features a lightly burnt, black malt character (and sometimes chocolate and/or coffee flavors) with a bit of roasty dryness in the finish. Overall flavor may finish from dry to medium-sweet, depending on grist composition, hop bittering level, and attenuation. May have a sharp character from dark roasted grains, although should not be overly acrid, burnt or harsh. Medium to high bitterness, which can be accentuated by the roasted malt. Hop flavor can vary from low to moderately high (US or UK varieties, typically), and balances the roasted malt flavors. Diacetyl low to none.

Mouthfeel: Medium to medium-full body. Moderately low to moderately high carbonation. Stronger versions may have a slight alcohol warmth. May have a slight astringency from roasted grains, although this character should not be strong.

Overall Impression: A substantial, malty dark ale with a complex and flavorful roasty character.

History: Stronger, hoppier and/or roastier version of porter designed as either a historical throwback or an American interpretation of the style. Traditional versions will have a more subtle hop character (often English), while modern versions may be considerably more aggressive. Both types are equally valid.

Comments: Although a rather broad style open to brewer interpretation, it may be distinguished from Stout as lacking a strong roasted barley character. It differs from a brown porter in that a black patent or roasted grain character is usually present, and it can be stronger in alcohol. Roast intensity and malt flavors can also vary significantly. May or may not have a strong hop character, and may or may not have significant fermentation by-products; thus may seem to have an "American" or "English" character.

Ingredients: May contain several malts, prominently dark roasted malts and grains, which often include black patent malt (chocolate malt and/or roasted barley may also be used in some versions). Hops are used for bittering, flavor and/or aroma, and are frequently UK or US varieties. Water with moderate to high carbonate hardness is typical. Ale yeast can either be clean US versions or characterful English varieties.

Vital Statistics:		OG:	1.048 - 1.065
IBUs:	25 - 50	FG:	1.012 - 1.016
SRM:	22 - 35	ABV:	4.8 - 6.5%

Commercial Examples: Great Lakes Edmund Fitzgerald Porter, Meantime London Porter, Anchor Porter, Smuttynose Robust Porter, Sierra Nevada Porter, Deschutes Black Butte Porter, Boulevard Bully! Porter, Rogue Mocha Porter, Avery New World Porter, Bell's Porter, Great Divide Saint Bridget's Porter Aroma: Rich malty sweetness often containing caramel, toffee, nutty to deep toast, and/or licorice notes. Complex alcohol and ester profile of moderate strength, and reminiscent of plums, prunes, raisins, cherries or currants, occasionally with a vinous Port-like quality. Some darker malt character that is deep chocolate, coffee or molasses but never burnt. No hops. No sourness. Very smooth. Appearance: Dark reddish copper to opaque dark brown (not black). Thick, persistent tan-colored head. Clear, although darker versions can be opaque.

Flavor: As with aroma, has a rich malty sweetness with a complex blend of deep malt, dried fruit esters, and alcohol. Has a prominent yet smooth schwarzbier-like roasted flavor that stops short of burnt. Mouth-filling and very smooth. Clean lager character; no diacetyl. Starts sweet but darker malt flavors quickly dominates and persists through finish. Just a touch dry with a hint of roast coffee or licorice in the finish. Malt can have a caramel, toffee, nutty, molasses and/or licorice complexity. Light hints of black currant and dark fruits. Medium-low to medium bitterness from malt and hops, just to provide balance. Hop flavor from slightly spicy hops (Lublin or Saaz types) ranges from none to medium-low.

Mouthfeel: Generally quite full-bodied and smooth, with a well-aged alcohol warmth (although the rarer lower gravity Carnegie-style versions will have a medium body and less warmth). Medium to medium-high carbonation, making it seem even more mouth-filling. Not heavy on the tongue due to carbonation level. Most versions are in the 7-8.5% ABV range.

Overall Impression: A Baltic Porter often has the malt flavors reminiscent of an English brown porter and the restrained roast of a schwarzbier, but with a higher OG and alcohol content than either. Very complex, with multi-layered flavors.

History: Traditional beer from countries bordering the Baltic Sea. Derived from English porters but influenced by Russian Imperial Stouts.

Comments: May also be described as an Imperial Porter, although heavily roasted or hopped versions should be entered as either Imperial Stouts (13F) or Specialty Beers (23).

Ingredients: Generally lager yeast (cold fermented if using ale yeast). Debittered chocolate or black malt. Munich or Vienna base malt. Continental hops. May contain crystal malts and/or adjuncts. Brown or amber malt common in historical recipes.

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Vital Stat	istics:	OG:	1.060 - 1.090
IBUs:	20 - 40	FG:	1.016 - 1.024
SRM:	17 - 30	ABV:	5.5 - 9.5%

Commercial Examples: Sinebrychoff Porter (Finland), Okocim Porter (Poland), Zywiec Porter (Poland), Baltika #6 Porter (Russia), Carnegie Stark Porter (Sweden), Aldaris Porteris (Latvia), Utenos Porter (Lithuania), Stepan Razin Porter (Russia), Nøgne ø porter (Norway), Neuzeller Kloster-Bräu Neuzeller Porter (Germany), Southampton Imperial Baltic Porter

13. STOUT

13A. Dry Stout

Aroma: Coffee-like roasted barley and roasted malt aromas are prominent; may have slight chocolate, cocoa and/or grainy secondary notes. Esters medium-low to none. No diacetyl. Hop aroma low to none.

Appearance: Jet black to deep brown with garnet highlights in color. Can be opaque (if not, it should be clear). A thick, creamy, long-lasting, tan- to brown-colored head is characteristic.

Flavor: Moderate roasted, grainy sharpness, optionally with light to moderate acidic sourness, and medium to high hop bitterness. Dry, coffee-like finish from roasted grains. May have a bittersweet or unsweetened chocolate character in the palate, lasting into the finish. Balancing factors may include some creaminess, medium-low to no fruitiness, and medium to no hop flavor. No diacetyl. Mouthfeel: Medium-light to medium-full body, with a creamy character. Low to moderate carbonation. For the high hop bitterness and significant proportion of dark grains present, this beer is remarkably smooth. The perception of body can be affected by the overall gravity with smaller beers being lighter in body. May have a light astringency from the roasted grains, although harshness is undesirable.

Overall Impression: A very dark, roasty, bitter, creamy ale.

History: The style evolved from attempts to capitalize on the success of London porters, but originally reflected a fuller, creamier, more "stout" body and strength. When a brewery offered a stout and a porter, the stout was always the stronger beer (it was originally called a "Stout Porter"). Modern versions are brewed from a lower OG and no longer reflect a higher strength than porters.

Comments: This is the draught version of what is otherwise known as Irish stout or Irish dry stout. Bottled versions are typically brewed from a significantly higher OG and may be designated as foreign extra stouts (if sufficiently strong). While most commercial versions rely primarily on roasted barley as the dark grain, others use chocolate malt, black malt or combinations of the three. The level of bitterness is somewhat variable, as is the roasted character and the dryness of the finish; allow for interpretation by brewers.

Ingredients: The dryness comes from the use of roasted unmalted barley in addition to pale malt, moderate to high hop bitterness, and good attenuation. Flaked unmalted barley may also be used to add creaminess. A small percentage (perhaps 3%) of soured beer is sometimes added for complexity (generally by Guinness only). Water typically has moderate carbonate hardness, although high levels will not give the classic dry finish.

Vital Statistics:		OG:	1.036 - 1.050
IBUs:	30 - 45	FG:	1.007 - 1.011
SRM:	25 - 40	ABV:	4 - 5%
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Commercial Examples: Guinness Draught Stout (also canned), Murphy's Stout, Beamish Stout, O'Hara's Celtic Stout, Russian River O.V.L. Stout, Three Floyd's Black Sun Stout, Dorothy Goodbody's Wholesome Stout, Orkney Dragonhead Stout, Old Dominion Stout, Goose Island Dublin Stout, Brooklyn Dry Stout

13B. Sweet Stout

Aroma: Mild roasted grain aroma, sometimes with coffee and/or chocolate notes. An impression of cream-like sweetness often exists. Fruitiness can be low to moderately high. Diacetyl low to none. Hop aroma low to none.

Appearance: Very dark brown to black in color. Can be opaque (if not, it should be clear). Creamy tan to brown head.

Flavor: Dark roasted grains and malts dominate the flavor as in dry stout, and provide coffee and/or chocolate flavors. Hop bitterness is moderate (lower than in dry stout). Medium to high sweetness (often from the addition of lactose) provides a counterpoint to the roasted character and hop bitterness, and lasts into the finish. Low to moderate fruity esters. Diacetyl low to none. The balance between dark grains/malts and sweetness can vary, from quite sweet to moderately dry and somewhat roasty.

Mouthfeel: Medium-full to full-bodied and creamy. Low to moderate carbonation. High residual sweetness from unfermented sugars enhances the full-tasting mouthfeel.

Overall Impression: A very dark, sweet, full-bodied, slightly roasty ale. Often tastes like sweetened espresso.

History: An English style of stout. Historically known as "Milk" or "Cream" stouts, legally this designation is no longer permitted in England (but is acceptable elsewhere). The "milk" name is derived from the use of lactose, or milk sugar, as a sweetener.

Comments: Gravities are low in England, higher in exported and US products. Variations exist, with the level of residual sweetness, the intensity of the roast character, and the balance between the two being the variables most subject to interpretation.

Ingredients: The sweetness in most Sweet Stouts comes from a lower bitterness level than dry stouts and a high percentage of unfermentable dextrins. Lactose, an unfermentable sugar, is frequently added to provide additional residual sweetness. Base of pale malt, and may use roasted barley, black malt, chocolate malt, crystal malt, and adjuncts such as maize or treacle. High carbonate water is common.

Vital Statistics:		OG:	1.044 - 1.060
IBUs:	20 - 40	FG:	1.012 - 1.024
SRM:	30 - 40	ABV:	4 - 6%
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Commercial Examples: Mackeson's XXX Stout, Watney's Cream Stout, Farson's Lacto Stout, St. Peter's Cream Stout, Marston's Oyster Stout, Sheaf Stout, Hitachino Nest Sweet Stout (Lacto), Samuel Adams Cream Stout, Left Hand Milk Stout, Widmer Snowplow Milk Stout

13C. Oatmeal Stout

Aroma: Mild roasted grain aromas, often with a coffee-like character. A light sweetness can imply a coffee-and-cream impression. Fruitiness should be low to medium. Diacetyl medium-low to none. Hop aroma low to none (UK varieties most common). A light oatmeal aroma is optional.

Appearance: Medium brown to black in color. Thick, creamy, persistent tan- to browncolored head. Can be opaque (if not, it should be clear).

Flavor: Medium sweet to medium dry palate, with the complexity of oats and dark roasted grains present. Oats can add a nutty, grainy or earthy flavor. Dark grains can combine with malt sweetness to give the impression of milk chocolate or coffee with cream. Medium hop bitterness with the balance toward malt. Diacetyl medium-low to none. Hop flavor medium-low to none.

Mouthfeel: Medium-full to full body, smooth, silky, sometimes an almost oily slickness from the oatmeal. Creamy. Medium to medium-high carbonation.

Overall Impression: A very dark, full-bodied, roasty, malty ale with a complementary oatmeal flavor.

History: An English seasonal variant of sweet stout that is usually less sweet than the original, and relies on oatmeal for body and complexity rather than lactose for body and sweetness. Comments: Generally between sweet and dry stouts in sweetness. Variations exist, from fairly sweet to quite dry. The level of bitterness also varies, as does the oatmeal impression. Light use of oatmeal may give a certain silkiness of body and richness of flavor, while heavy use of oatmeal can be fairly intense in flavor with an almost oily mouthfeel. When judging, allow for differences in interpretation.

Ingredients: Pale, caramel and dark roasted malts and grains. Oatmeal (5-10%+) used to enhance fullness of body and complexity of flavor. Hops primarily for bittering. Ale yeast.

Water so	urce should have	ave some ca	rbonate hardness
Vital Stat	istics:	OG:	1.048 - 1.065
IBUs:	25 - 40	FG:	1.010 - 1.018
SRM:	22 - 40	ABV:	4.2 - 5.9%

Commercial Examples: Samuel Smith Oatmeal Stout, Young's Oatmeal Stout, McAuslan Oatmeal Stout, Maclay's Oat Malt Stout, Broughton Kinmount Willie Oatmeal Stout, Anderson Valley Barney Flats Oatmeal Stout, Tröegs Oatmeal Stout, New Holland The Poet, Goose Island Oatmeal Stout, Wolaver's Oatmeal Stout

13D. Foreign Extra Stout

Aroma: Roasted grain aromas moderate to high, and can have coffee, chocolate and/or lightly burnt notes. Fruitiness medium to high. Some versions may have a sweet aroma, or molasses, licorice, dried fruit, and/or vinous aromatics. Stronger versions can have the aroma of alcohol (never sharp, hot, or solventy). Hop aroma low to none. Diacetyl low to none. Appearance: Very deep brown to black in color. Clarity usually obscured by deep color (if not opaque, should be clear). Large tan to brown head with good retention.

Flavor: Tropical versions can be quite sweet without much roast or bitterness, while export versions can be moderately dry (reflecting impression of a scaled-up version of either sweet stout or dry stout). Roasted grain and malt character can be moderate to high, although sharpness of dry stout will not be present in any example. Tropical versions can have high fruity esters, smooth dark grain flavors, and restrained bitterness; they often have a sweet, rum-like quality. Export versions tend to have lower esters, more assertive roast flavors, and higher bitterness. The roasted flavors of either version may taste of coffee, chocolate, or lightly burnt grain. Little to no hop flavor. Very low to no diacetyl.

Mouthfeel: Medium-full to full body, often with a smooth, creamy character. May give a warming (but never hot) impression from alcohol presence. Moderate to moderately-high carbonation.

Overall Impression: A very dark, moderately strong, roasty ale. Tropical varieties can be quite sweet, while export versions can be drier and fairly robust.

History: Originally high-gravity stouts brewed for tropical markets (and hence, sometimes known as "Tropical Stouts"). Some bottled export (i.e., stronger) versions of dry or sweet stout also fit this profile. Guinness Foreign Extra Stout has been made since the early 1800s. Comments: A rather broad class of stouts, these can be either fruity and sweet, dry and bitter, or even tinged with Brettanomyces (e.g., Guinness Foreign Extra Stout; this type of beer is best entered as a Specialty Beer - Category 23). Think of the style as either a scaled-up dry and/or sweet stout, or a scaled-down Imperial stout without the late hops. Highly bitter and hoppy versions are best entered as American-style Stouts (13E).

Ingredients: Similar to dry or sweet stout, but with more gravity. Pale and dark roasted malts and grains. Hops mostly for bitterness. May use adjuncts and sugar to boost gravity. Ale yeast (although some tropical stouts are brewed with lager yeast).

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Vital Sta	tistics:	OG:	1.056 - 1.075
IBUs:	30 - 70	FG:	1.010 - 1.018
SRM	30 - 40	ABV	55-8%

Commercial Examples: Tropical-Type: Lion Stout (Sri Lanka), Dragon Stout (Jamaica), ABC Stout (Singapore), Royal Extra "The Lion Stout" (Trinidad), Jamaica Stout (Jamaica),

Export-Type: Freeminer Deep Shaft Stout, Guinness Foreign Extra Stout (bottled, not sold in the US), Ridgeway of Oxfordshire Foreign Extra Stout, Coopers Best Extra Stout, Elysian Dragonstooth Stout

13E. American Stout

Aroma: Moderate to strong aroma of roasted malts, often having a roasted coffee or dark chocolate quality. Burnt or charcoal aromas are low to none. Medium to very low hop aroma, often with a citrusy or resiny American hop character. Esters are optional, but can be present up to medium intensity. Light alcohol-derived aromatics are also optional. No diacetyl.

Appearance: Generally a jet black color, although some may appear very dark brown. Large, persistent head of light tan to light brown in color. Usually opaque.

Flavor: Moderate to very high roasted malt flavors, often tasting of coffee, roasted coffee beans, dark or bittersweet chocolate. May have a slightly burnt coffee ground flavor, but this character should not be prominent if present. Low to medium malt sweetness, often with rich chocolate or caramel flavors. Medium to high bitterness. Hop flavor can be low to high, and generally reflects citrusy or resiny American varieties. Light esters may be present but are not required. Medium to dry finish, occasionally with a light burnt quality. Alcohol flavors can be present up to medium levels, but smooth. No diacetyl.

Mouthfeel: Medium to full body. Can be somewhat creamy, particularly if a small amount of oats have been used to enhance mouthfeel. Can have a bit of roast-derived astringency, but this character should not be excessive. Medium-high to high carbonation. Light to moderately strong alcohol warmth, but smooth and not excessively hot.

Overall Impression: A hoppy, bitter, strongly roasted Foreign-style Stout (of the export variety). Comments: Breweries express individuality through varying the roasted malt profile, malt sweetness and flavor, and the amount of finishing hops used. Generally has bolder roasted malt flavors and hopping than other traditional stouts (except Imperial Stouts).

Ingredients: Common American base malts and yeast. Varied use of dark and roasted malts, as well as caramel-type malts. Adjuncts such as oatmeal may be present in low quantities. American hop varieties.

Vital Statistics:		OG:	1.050 - 1.075
IBUs:	35 - 75	FG:	1.010 - 1.022
SRM:	30 - 40	ABV:	5 - 7%

Commercial Examples: Rogue Shakespeare Stout, Deschutes Obsidian Stout, Sierra Nevada Stout, North Coast Old No. 38, Bar Harbor Cadillac Mountain Stout, Avery Out of Bounds Stout, Lost Coast 8 Ball Stout, Mad River Steelhead Extra Stout

13F. Russian Imperial Stout

Aroma: Rich and complex, with variable amounts of roasted grains, maltiness, fruity esters, hops, and alcohol. The roasted malt character can take on coffee, dark chocolate, or slightly burnt tones and can be light to moderately strong. The malt aroma can be subtle to rich and barleywine-like, depending on the gravity and grain bill. May optionally show a slight specialty malt character (e.g., caramel), but this should only add complexity and not dominate. Fruity esters may be low to moderately strong, and may take on a complex, dark fruit (e.g., plums, prunes, raisins) character. Hop aroma can be very low to quite aggressive, and may contain any hop variety. An alcohol character may be present, but shouldn't be sharp, hot or solventy. Aged versions may have a slight vinous or port-like quality, but shouldn't be sour. No diacetyl. The balance can vary with any of the aroma elements taking center stage. Not all possible aromas described need be present; many interpretations are possible. Aging affects the intensity, balance and smoothness of aromatics.

Appearance: Color may range from very dark reddish-brown to jet black. Opaque. Deep tan to dark brown head. Generally has a well-formed head, although head retention may be low to moderate. High alcohol and viscosity may be visible in "legs" when beer is swirled in a glass.

Flavor: Rich, deep, complex and frequently quite intense, with variable amounts of roasted malt/grains, maltiness, fruity esters, hop bitterness and flavor, and alcohol. Medium to aggressively high bitterness. Medium-low to high hop flavor (any variety). Moderate to aggressively high roasted malt/grain flavors can suggest bittersweet or unsweetened chocolate, cocoa, and/or strong coffee. A slightly burnt grain, burnt currant or tarry character may be evident. Fruity esters may be low to intense, and can take on a dark fruit character (raisins, plums, or prunes). Malt backbone can be balanced and supportive to rich and barleywine-like, and may optionally show some supporting caramel, bready or toasty flavors. Alcohol strength should be evident, but not hot, sharp, or solventy. No diacetyl. The palate and finish can vary from relatively dry to moderately sweet, usually with some lingering roastiness, hop bitterness and warming character. The balance and intensity of flavors can be affected by aging, with some flavors becoming more subdued over time and some aged, vinous or port-like qualities developing.

Mouthfeel: Full to very full-bodied and chewy, with a velvety, luscious texture (although the body may decline with long conditioning). Gentle smooth warmth from alcohol should be present and noticeable. Should not be syrupy and under-attenuated. Carbonation may be low to moderate, depending on age and conditioning.

Overall Impression: An intensely flavored, big, dark ale. Roasty, fruity, and bittersweet, with a noticeable alcohol presence. Dark fruit flavors meld with roasty, burnt, or almost tar-like sensations. Like a black barleywine with every dimension of flavor coming into play.

History: Brewed to high gravity and hopping level in England for export to the Baltic States and Russia. Said to be popular with the Russian Imperial Court. Today is even more popular with American craft brewers, who have extended the style with unique American characteristics.

Comments: Variations exist, with English and American interpretations (predictably, the American versions have more bitterness, roasted character, and finishing hops, while the English varieties reflect a more complex specialty malt character and a more forward ester profile). The wide range of allowable characteristics allow for maximum brewer creativity.

Ingredients: Well-modified pale malt, with generous quantities of roasted malts and/or grain. May have a complex grain bill using virtually any variety of malt. Any type of hops may be used. Alkaline water balances the abundance of acidic roasted grain in the grist. American or English ale yeast.

Vital Statistics:		OG:	1.075 - 1.115
IBUs:	50 - 90	FG:	1.018 - 1.030
SRM:	30 - 40	ABV:	8 - 12%

Commercial Examples: Three Floyd's Dark Lord, Bell's Expedition Stout, North Coast Old Rasputin Imperial Stout, Stone Imperial Stout, Samuel Smith Imperial Stout, Scotch Irish Tsarina Katarina Imperial Stout, Thirsty Dog Siberian Night, Deschutes The Abyss, Great Divide Yeti, Southampton Russian Imperial Stout, Rogue Imperial Stout, Bear Republic Big Bear Black Stout, Great Lakes Blackout Stout, Avery The Czar, Founders Imperial Stout, Victory Storm King, Brooklyn Black Chocolate Stout The Ohio Valley Homebrew Association Peter Frederick 15805 Darmstadt Rd Evansville, IN 47726

a quart or so of hot wort and cooling it separately in a sanitized glass jar and pouring the yeast into it while the main wort is cooling. With good yeast, it should be working hard and foaming before the wort is cool enough to pitch. I've done this routinely for lagers for years. Even better is to make a small batch of unhopped wort (a pound per gallon or so of plain dry malt extract, boiled and cooled) and pitching the packet of yeast into a quart or so three or four days before brewing. If this starter batch is allowed to ferment out, the plain beer can be poured off the sedimented yeast, the yeast suspended in a small amount of cooled wort, and used to pitch a 5 or 10 gallon batch. An erlynmeyer flask with a cotton plug stopper is best for this, and a magnetic stirrer will help even more, as slowly stirring the fermenting wort will introduce a continuous supply of oxygen, resulting in more yeast cells. Don't, however, use the whole starter if you continuously stir it, allow the yeast to settle and pour off the "beer" -- it will be quite stale, and can "stale" the whole batch.

This procedure will also work for culturing yeast from bottle conditioned beer. Make up a few cups of wort, boil, cool, transfer to a sanitized container, and pitch the dregs from the bottle. Frementation will be somewhat slower to start than from a packet of dry yeast due to lower cell count, but will work just fine, yeilding enough yeast cells to properly pitch even a lager.

Larger batches require somewhat larger amounts of yeast, and up to a gallon of wort can be pitched and fermented out to produce a starter. Most lager yeasts will work best if a half gallon starter is used, allowed to ferment out, and the settled yeast used to pitch a batch. This prevents the very long frementation often seen in complex malts.

Hop of the Month: Amarillo

Brand VGXP01 is an aroma-type cultivar of recent origin, dicovered and introduced by Virgil Gamache Farms, Inc. It is used for its aromatic properties, and also for its bittering properties due to its low co-humulone content. Alpha acids: 8-11%. It is viewed somwhat as a Cascade type. In use it produces a pronounced citrus character, especially if used to dry-hop. Pale Malt is the backbone of ale styles. It is very fully modified, never having any "steely ends" and has low protein content so that a protein rest is not required. Normally mashed in a single temperature "English" style infusion mash. Two major types available, 2-row and six-row, with the 2-row being lower in enzyme and protien content. Large amounts of adjunct grain should not

Malt of the Month: Pale Malt

Pale Malt is the backbone of ale styles. It is very fully modified, never having any "steely ends" and has low protein content so that a protein rest is not required. Normally mashed in a single temperature "English" style infusion mash. Two major types available, 2-row and six-row, with the 2-row being lower in enzyme and protien content. Large amounts of adjunct grain should not be used with 2-row pale malt, as it may not have enough enzymatic content to properly convert the excess starch in the adjunt. Slightly darker than Lager or Pilsner malt, being a little higher kilned, Pale Malt produces a deep golden color if used as the sole malt in the mash. Typcially mashed with some crystal or dark malts for color and flavor.