

Brewers' Guild Newsletter



"Ale is made of malte and water; and they which do put any other thyng to ale than is rehersed, except yest, barme, or godisgood, doth sofysticate theyr ale. Ale for an Englysche man is a naturall drinke... It doth engendre grose humoures, but yette it maketh a man strong."

Dyetary (1542) Andrew Boorde

Twelfth Night, A. S. XXXI



Brewers' Guild Ranking System

DEFINITIONS:

Style - beer, wine, mead, cordial, or non-alcoholic beverage.

Public Service Work - teaching a workshop, submitting articles or art to newsletters, holding a contest or tasting, etc.

Proficiency - competency in a style, as judged by fellow brewers from a sampling of at least four different brews.

RANKINGS:

Apprentice - Anyone who wants to play and participate in the Brewers' Guild activities. (Is entitled to wear the Guild badge on a green field.)

Journeyman - Someone who is proficient in at least one style of brewing and has performed at least one public service work. (Is entitled to wear the Guild badge on a blue field.)

Craftsman - Someone who is proficient in at least two styles of brewing, and had performed at least three public service works. (Is entitled to wear the Guild badge on a red field.)

Master Brewer - To achieve this rank you must have attained the previous rank of Craftsman, be nominated by your fellow Craftsmen, and be approved by the other Master Brewers. (Is entitled to wear the Guild badge on a purple field.)

All members of the Guild are encouraged to donate bottles of their beverages to the Guild for use as "taxes" given to the reigning Royalty during court presentations. Brewers outside of the central Kingdom, or in the more distant regions of the Marches, may achieve awards up through Craftsman by participating in their local events. Such individuals should write to the Guild Master to inform him of their level of participation.

The Guild badge is as follows: "Fieldless, a laurel leaf Vert on a tun Or". The tun, as generally depicted, is a wooden barrel.

The Kingdom Brewer's Guild newsletter is an unofficial publication and is printed and published through donations and unofficial subscriptions. It is published at no cost to the Brewers' Guild or the SCA. Members who would like to have a newsletter mailed to their home (vice hoping to pick up a spare copy during Kingdom events) are welcome to donate \$ 5.00 per year to the Guild Chronicler. Both stamps and suitable coins of the realm will be gleefully accepted!

Upcoming Brewing Competitions: Enter Your Best Brews And Have Fun!

Twelfth Night	Cordials (Pay your taxes to the Crown!)
Twelfth Night (Lochac)	Brewing with honey competition.
Cynagua Winter Investiture	Lager or cold-fermented beer
March Crown	TBD
Mists Spring Coronet	Preparations - period mixed drinks, wassails, and such
Beltane	TBD
Mists Spring Investiture	Open - if you think it is Period, bring it!
Cynagua Spring Coronet	TBD
June Crown	TBD
Cynagua Summer Investiture	TBD
Purgatorio	TBD
Mists Fall Coronet	TBD

** (Ursus says that the Kingdom-level competition list will be determined during the Twelfth Night Brewers' Guild meeting... see you there!)*

"NOTICE: THIS SPACE AVAILABLE!"

Well, after nearly a year of publishing this newsletter, and a fun time it has been, I am beginning to run out of reasonably original (or stylishly stolen) things to say. So unless our members want to read my incoherent ramblings during the coming year, I strongly suggest that *somebody* send in a few articles, recipes, and art work (both cover material and snippets to paste inside) that I can use in the next few issues. I would also welcome a deputy chronicler who would like to take over the publication of the newsletter sometime in the coming year... Thanks!

Ancient Brewing Art

Approximately 6000 years ago man was a hunter-gatherer, subsisting mostly upon what he could hunt down, scavenge, or find growing on the plains and in the forests. As a result, much of pre-civilized man's foodstuff were the seeds of wild grasses and plants that were seasonally available for harvest. Early man probably just picked what grasses he could find, which included wild barley, and eventually some enterprising young man or woman realized that by sticking some of their harvest of seeds in the ground they could come back later and harvest

even more. The earliest civilizations began around such planting and out of this the first cities arose. Sometime in mankind's distant past, they began to cook barley as porridge or back it into coarse loaves of bread. And, as any brewer knows, the making of a porridge from crushed barley and hot water is the first step toward making barley brews such as beer. In fact, such a porridge, if left unattended for several days at warm temperatures, will quickly ferment into beer from the presence of wild yeast on the grains.

The first modern city, "Uruk", was established by the Mesopotamians about 3500 BCE with an economy believed to have been based mostly on the growing and sale of barley. It quickly became a very rich and powerful city and the hub of trade for the entire known world of its time. We know from their ancient trading records that one of the principal goods being traded outwards from Uruk was beer and some of the earliest evidence of beer comes from digs at these sites. In fact, the oldest surviving example of beer advertising comes from this time, on a clay tablet proscribing "*drink Elba, the beer with the heart of a lion!*" Perhaps the most relevant question may be "why beer instead of bread?"

Barley, once well dried, stores quite well, as I mentioned earlier. But it is very susceptible to molds and other rot when dampened, and pests such as rats and mice can destroy huge quantities of the grains in a single feeding session. And unlike wheat, barley has very little gluten, the protein that holds the dough together and allows air bubbles to be trapped in the bread, making it rise.

So bread made out of barley tends to be extremely coarse, dense, and hard to chew. But the biggest drawback is weight versus nutritional value. Raw barley is bulky and somewhat difficult to handle in the days before good, heavy grains bag were much available. But if you mash the barley (which is to soak it with hot water to convert its starches to malt sugars, and then ferment it, you not only concentrate its nutritional value but also greatly increase its vitamin content, something we know today to be about a 4 fold increase in the B vitamins.

Now you have a readily consumed, rather rat-resistant, and highly desirable merchandise. Where you might have sold the raw barley for a certain amount, the beer now can claim a much higher price per equal weight. Desirable, indeed! The Mesopotamians produced beer, we know that for sure from their written records and archeological findings. Their descendants, the Sumerians, produced at least 19 different types of beer! And the Babylonians produced a highly developed written language and civil laws, most of which were initially designed to better control the production and sales of beer.

Some of the earliest writings known of are the cuneiform alphabet, which linguists feel arose from the need to keep track of beer manufacture and sales. This cuneiform alphabet arose about 4500 years ago and consisted of marks

impressed into wet clay tablets, which were then either dried and/or fired for preservation. Fortunately, we have many well-preserved examples remaining today for study.

The Sumerian word for a beer shop was "bit sikari". The Sumerians felt that the world belonged to the Earth-Mother, Ama Gestin, and gift of beer was given to mankind by goddesses, the lead of which was Ninkasi, whose name means "The Lady Who Fills the Mouth". This goddess lived on Mt. Sabu, which itself means "The mountain of the tavern keeper". Since so much of the Sumerian theological existence revolved around beer, it should not be too surprising that the oldest recorded beer recipe is in the form of a Sumerian hymn to the goddess Ninkasi (as published in the March Crown A.S. XXX issue of this newsletter).

The Babylonian civilization followed the Sumerian one and inherited both a love of beer and a significant amount of brewing knowledge and technology from them. The Babylonians had many names for beer, one for each specific category of beer, from which the root word is "kassi", after the goddess Ninkasi. Among the varieties available were: Kassi (black beer), Kassag (fine black beer), Kassagasaan (premium beer), Kasusasig (spiced beer), Kurungig (wheat beer). Interesting, eh? The Babylonians were the first to create a designation for "premium beer"! They also passed laws that established the sale of a beer in a higher-than-deserved classification or at too high of a price as a crime punishable by death. During the same period, the Nubians brewed a famously potent beer, named "bousa", which may have been some type of stout. The name lives on, however, as the root word for "booze".

The symbol of brewers in these ancient times was the strainer, or filter, mat which was woven from reeds or straw. An ancient Assyrian clay tablet, dating back to around 2000 BCE, tells a tale remarkably similar to that of Noah and the Ark in the Old Testament. In it, the story prominently mentions that beer was taken in the Ark as a valuable provision.

From the next great period in brewing history, that is the Egyptians, we have the following translation of how they made barley brews. This process was recorded by the ancient chemist Zosimus of Panopolis: *"Take fine clean barley and moisten it for one day and draw it off or also lay it in a windless place until morning and again wet it in six hours. Cast it into a smaller perforated vessel and wet it and dry it until it shall become shredded and when this is so shake it in the sunlight until it falls apart... Next grind it and make it into loaves adding leaven, just like bread, and cook it rather raw and whenever (the loaves) rise, dissolve sweetened water and strain through a strainer or light sieve... In baking the loaves cast them into a vat with water and boil it a little in order that it may not froth nor become lukewarm and draw up and strain it having prepared it, heat it and examine it."*

Once the half-baked loaves of barley and spelt (wheat) bread were broken up and mixed with warm water, they were forced through the bottom of a woven reed basket into large fermentation jars, some of which were larger than a man is tall. These jars were then sealed with a plug of Nile river mud and the outsides plastered with pitch. Then they were placed in a cool location until ready to drink. Several hieroglyphs show pictograms ("flow charts") detailing the above process by which beer was, and can still be, made.

The Mesopotamians, Sumerians, Babylonians, and Egyptians all drank their beer from these large jars using straws or sucking tubes. Pictograms frequently show this being used in drinking beer. In 434 BCE, Herodotus (484-460 BCE) wrote the first treatise on beer and included the following about beer drinking in Egypt: "For drink, there was beer which was very strong when not mingled with water, but was agreeable to those who were used to it. They drank this with a reed, out of the vessel that held the beer, upon which they saw the barley swim." This probably helped to keep the coarse barley residue (which floated on the surface) from being introduced into the drinker's mouth. So where does this brief history of barley beverages lead to? Funny you should ask...

"An Ancient Beer Tasting at March Crown!!!"

Much of mankind's brewing knowledge and technology arose from these three early civilizations. In honor of their contribution to our noble art, this humble Chronicler is calling for our members to try their hand at making one of these ancient brews for a special tasting at the March Crown BG meeting. Mind you, this is not intended to be a competition or replacement of the scheduled brewing competition, but rather an opportunity for us to honor and acknowledge our distant ancestors' contributions to the brewing arts. (If anybody needs a reprint of the Hymn to Ninkasi, please let me know and I will send it to you.)

An Experiment in the Making of a Grut Ale

The following is a summary of some very interesting information I discovered last Fall while researching the history of *un-hopped* ales, the traditional barley beverages made before hops evolved as the favorite flavoring agent during the 14th and 15th centuries. These ales were flavored with an herb mixture called *grut* (or "gruit" or "grout"), the mixtures themselves often being extremely valuable and their exact composition kept secret.



One of the more interesting references (*A Historical Companion to House-Brewing*, by Clive LaPensee) states that a recorded gruit (or, as he says, "grut") from 1548 used an equal-parts mixture of the following: marjoram,

mint, fennel, dill, hyssop, camomile, sage, rosemary, pelletory, avens, lavender, roses, and un-named spices. Also, alecost (costmary) was widely used as a bittering herb for ales throughout the Middle Ages, and rosemary was one of the most popular gruits until hops came along.

Another excellent reference, "Old British Beers and How to Make Them" by Dr. John Harrison, has several gruit recipes. One of them calls for the use of 1.5 grams each of myrica gale ("sweet gale"), ledum palustre (marsh rosemary), and achillea millefolium (millfoil or yarrow) per each gallon of wort for each gallon of wort. The gruit is added to the boiling wort (with an average starting OG of 1.080) during the last 20 minutes. He also gives a similar recipe for an ale of OG 1.050 and suggests using only 1 gram each of the herbs. Both recipes date from the mid-1300's.

Finally, a Welsh Ale from the 1400's used (per gallon) 12 gm cinnamon, 6 gm ginger, 3 gm cloves, and 12 gm white pepper. I find this use of spices quite interesting, in light of an old Victorian-era drinking song which goes, in part, "for ale, hony, cinnamon, and cloves; that is how I got my jolly red nose!" Apparently drinking copious (!) amounts of spiced ales can cause the blood vessels in your nose to enlarge, making it beet red in color. Should not be a problem in the amounts of beer we drink today...

I also was interested in the type of malts being used by English brewers during the Middle Ages and learned that nearly all modern malting processes do not produce the "brown malt" typical of Period style. However, I finally found a source for imported English brown malt and obtained 20 pounds of it for experimentation. While the color of the malt resembles Crystal 40, the resulting color of the wort (even when I cut it by 40% with 2-row ale malt to assure that there was sufficient diastatic power for starch conversion) turned out very much like a Porter with a deep reddish-brown color and a toasted flavor.

I then combined these two pieces of knowledge to produce my first *true* medieval ale. The following recipe produced 3 gallons of wort, using the partigyle system of mashing, which was flavored with a gruit of yarrow, rosemary, and marjoram. While it has a distinctly medicinal nose and taste, it is also surprisingly drinkable. I will try it again, but this time cut back on the yarrow and rosemary by half, and eliminate the marjoram which I feel gave it the medicinal nose.

Samples of this unique ale will be available at the Twelfth Night Brewers' Guild meeting. Here's a wish for a wonderful New Year!

Category : Grut Ale
Method : Full Mash
Starting Gravity : 1.057
Ending Gravity : 1.014
Alcohol content : 5.5%
Recipe Makes : 3.0 gallons
Total Grain : 7.00 lbs.
Color (srm) : 101.2

Malts/Sugars:
5.00 lb. English Brown Malt
2.00 lb. Ale 2-Row (DWC)

- Grain/Water Ratio: 1.25 quarts/pound, with strike water of 2.19 gallons of water at 175F to achieve a mash temperature of 156F for 1.5 hours.
- Did not sparge, but rather re-infused (partigyle technique) with 1.75 gallon 156F water for ½ hour then drained off that run and added to the first run of wort. As my boiling kettle evaporates about 2 gallons per hour, and the grain retained about ¾ gallon, I added 1.5 gallons of boiling water to the wort over the course of the next 90 minutes of boiling.
- After boiling for 1 hour, I adding 10 grams (each) of fresh rosemary, marjoram, and dried yarrow plus 5 whole cloves in a mesh bag.
- After cooling the wort by pouring it into a bucket inside a larger barrel of cool water (more Period than using a wort chiller), I transferred the wort into a carboy and pitched with WY London Ale yeast. Fermentation was brisk and complete within 1 week. It also clarified very nicely over the following week. I then kegged and force carbonated the beer since I just did not have sufficient time to prime/bottle the darned stuff... but that would have been much more "period" in style.

The Rise and Demise of Grut Ales in Western Europe

The following primary references were used:

Smith, Gregg, *Beer, A History of Suds*, USA 1995; Eames AD, *Secret Life of Beer*, USA, 1995; and La Pensée C, *The Historical Companion to House-Brewing*, England 1990.

(The following is taken from Duncan Saxthorpe's presentation entitled "A Brief History of Beer" as given at the recent Collegium Occidentalis.)

After the final fall of the Roman empire in 476 (when the last Roman Emperor, Romulus Augustus, was killed by his German captors), organized brewing collapsed for hundreds of years since it required a centralized administration, reliable sources of raw ingredients, and sustainable technical know-how. Then in the early Middle Ages the Church recognized that it could earn the badly needed money for its rapid growth by producing and selling beer for the masses.

The Church already had a highly centralized administration network, distribution network, venture capital, farms (run by monks), and best of all was already making beer at its abbeys for local consumption. And with a bit of luck just might be able to create brewing monopoly in the name of God! It received that measure of luck when Charlemagne began to piece together the Holy Roman Empire in late 8th Century. Charlemagne saw two things which could help him maintain control over the people he now ruled: the church and beer.

Charlemagne brought Saint Gall to his own abbey, fresh from Gall's work with the pagan, but beer-loving, Celts, and charged him to make beer. Gall brought with him a great knowledge of malting, mashing, fermenting, and storage of beer. He also built upon this knowledge at the abbey, in the process developing entirely new techniques. Gall truly refined the art of brewing and the knowledge shared by him made the quality of the Church's beers far superior to their competitors. While Charlemagne gave all brewers great prestige and power in his lands, the Church was in the best position to benefit the most... and did so!

After a while, the Church was producing much of the beer consumed by the populace, and was even enticing the peasants into church activities by providing them with free beer during the ceremonies! The bishops and priests quickly taught their parishes that if they wanted continued access to the ales produced by the church, that they had to participate church activities. And of course, also contribute their money, labor, and goods to the church!

These beery church celebrations, festivals, and religious activities became known as "church-ales", and specifically for weddings were called "bride-ales" from which our modern word "bridal" comes. This word is particularly humorous when you realize that the English word "bride" ("bryd" in old English) has its roots in the Germanic word "bruths", which means to brew or cook! But before you think that all it meant for a woman to become married was a life of slavery to the kitchen and brew pot, remember that brewing was one of the few ways by which they could acquire and legally keep money of their own, so brewing was a very valuable skill for any young woman to learn! Of course, if you chose to produce ale and sell it, you did so at considerable risk if your talents were not up to par! In the city of Danzig in the 11th century, an edit was decreed that *"whoever makes poor beer shall be transferred to the dung heap"*.

This Church-held monopoly remained intact for hundreds of years, but by the 1300's was showing signs of weakening. Brewing Guilds arose, mostly in out-of-the-way places where the central Church wielded less influence, and by establishing guidelines for the production of quality beer (and through the teaching of the necessary knowledge and technology for the same), began to drain away some of the Church's market. However, the real force for change came from an unexpected source: The Black Death of 1347. Between one-third

and two-thirds of all living souls in Europe perished during the terrible years of three separate epidemics of this highly lethal plague.

The end result that the demand for laborers increased dramatically, since so many fewer remained alive to do the work, and their wages rose accordingly. This provided the common man and woman with an unprecedented amount of disposable income never before seen in human history. And much of it was now spent on drinking ale. Remember that in the 1300's the rivers, lakes, and streams that provided nearly all drinking water to the towns, villages, and cities were becoming horribly polluted with human, animal, and mineral wastes. While little was understood regarding the reason that water was such a dangerous choice, they did realize that people who drank only beer (or wine) remained healthier than those who did not.

Thus arose an eager market for anyone who could brew and sell ale. The Church managed to maintain a portion of their monopoly in the area of grut (or *groat*, in English), the secret herbal mixtures used to flavor and bitter the ales. The Church sold their grut in quantity to home brewers and commercial brewers alike, but their battle to keep the larger share of the profits was lost.

As with all prior human history, women again were the key producers of beer and ale. A woman who made and sold ale was called an "ale wife", and many laws were passed to regulate her work. And to go along with the ale, many sold food, had entertainment, and even offered travelers (or over-indulgents) a place to sleep. In England in the early 13th century, laws were passed that anyone who wished to sell ale had to place a broom or pole above the entrance to their place of business, usually their home. This was called the "ale stake".

Between the early 1300's and late 1500's, many thousands of taverns and alehouses were opened in England at the rate of more than one per day! Keep in mind that in 616 the Earl of Kent proclaimed a law that strictly regulated and suppressed the sale of ale outside of the Church, and in 900 King Edgar decreed that there should only be one alehouse per settlement! My, how the times had changed! In 1309, London had 35,000 residents, with 354 taverns and 1330 alehouses... that is 1 for every 21 inhabitants! And the trend was just beginning! Not that all kings were against ale, however, for in 1215 King John included a clause into the Magna Carta which contained standards for the production of quality ale!

In the early Middle Ages, ale was commonly sold in large wooden tankards which were bought and then shared between several individuals. Not very sanitary, perhaps, but far easier to prepare and serve than in individual tankards. So, towards the end of the 10th century, King Edgar had the bright idea to pass a

law that such tankards hold 2 quarts and have eight pegs in them, one for each draught of beer. This law was intended to prevent one customer from drinking more than his share from the communal tankard! Punishments were meted out to those who disobeyed these laws, and from this distant time through today remains a saying "to take a man down a peg"... meaning in its day to drink or take away another's beer!

So where does that leave us regarding how ales were made during this time? Perhaps a brief word is in order regarding what was used in the production of grut (grout). The Church maintained large farms and herb gardens in order to produce the ingredients for their grut. Among these were rosemary, alecost, yarrow, hyssop, coriander, fennel, dill, marjoram, nettle (but was salty and of little popularity), ivy, mace, betony, comfrey, alehoof, and costmary. Unscrupulous merchants also sometimes added ingredients with narcotic or hallucinatory properties in order to dilute their relatively expensive ales while retaining a measure of intoxicating potency.

In 1520 the Royal brewer of Eltham in the service of Henry VIII was enjoined not to add hops or brimstone to the ale that he made. While Henry VIII was well aware of the growing favor of beer in England, versus the traditional un-hopped ales, many diarchds fought long and bitterly to keep hops out of their English brews. Beer (being hopped and more highly carbonated) was seen as being an invasion by foreigners (mostly Dutch and German) and worse yet, a vile corruption of the most important drink of the times. Even while grut was rapidly losing ground to the flowers of the lupulin plant, in 1597 the English herbalist, Gerard, wrote: *"the women of our Northern Countries, especially in Wales and Cheshire, spice their ale with ivy"*.

Also, Grigson wrote in 1548 of a grout renowned for its healthy properties, calle Rosa Solis. It contained equal measures of rosemary, sage, thyme, chamomile, marjoram, mint, fennel, avens, dill, pelletory, lavender, hyssop, roses, and spices. As previously noted, the use of rosemary in ale was very popular and continued through to the Victorian era, although in ever-decreasing demand.

Andrew Boorde, a 16th century writer, wrote of ale in 1542 and said *"Ale is made of malte and water; and they which do put any other thyng to ale than is rehersed, except yest, barme, or godisgood, doth sofysticate theyr ale. Ale for an Englyshe man is a naturall drinke. Ale must have these properties: it muste be fresshe and cleare, it muste not be ropy nor smoky, nor it must have no weft nor tayle. Ale should not be dronke under V days olde. Newe ale is unwholesome for all men. Ane sowre ale, and deade ale the which doth stande a tyle, is good for no man. Barly malte maketh better ale than oten malte or any other corne doth. It doth engendre grose humoures, but yette it maketh a man strong."*

But he also penned a scathing testimony against hops and beer: *"Bere is made of malte, of hoppes, and water; it is the naturall drynke of the Dutche man, and nowe of lete dayes it is much used in England to the detryment of many Englysshe people; speciyally it kylleth them the which be troubled with the colyke; and the stone and the strangulion; for the drynke is a colde drynke, yet it doth make a man fat, and doth inflate the bely, as it doth appere by the Dutche men's faces and belyes. If the bere be well served and be fyned, and not new, it doth qualify heat of the lyver"*.

However, in 1512, a large English army was encamped in France, from whence John Stile wrote to his King: *"And hyt plesse your Grace, the grettest lack of vytuals that ys here ys of bere, for your subjectys had lyver for to drynk bere than wyne or syder for the hote wyne dothe burne theym, and the syder dothe caste theym yn dysese and sikenysus"*. His reference is clearly to hopped beer rather than the more traditional ale, so even during a time when England had banned the use of hops, an entire English army was coming to prefer the taste of beer over ale. And since these English laws also exempted two groups of foreigners, the Dutch and the Flemish, there was plenty of beer around for an adventuresome Englishman to try!

At first, their leaders felt that while these vile foreigners were welcome to drink their foul beer, what respectable Englishman would consume such a foully contaminated brew? Well, as it turned out, most of them did! The word spread through the populace that hopped beers were good, and brewers realized that they could make beer last far longer by adding hops than grut. Of course, England had other climatic changes in those years which kept much of their attention focused on things other than ale versus beer: In 1524 the following infamous lines were written: *"Hops, Reformation, Bays and Beer, all came to England in one bad year"*.

Thus did hops replace grut in our barley beverages...



The following delicious recipe for spiced wine was submitted by the lovely Lady Crystal O'da Westermarck: (A second recipe adapted by Lady Crystal will be published in the March Crown issue!)

Spiced Wine

Original: Coulton, GC and Power, Eileen, editors and translators. *Le Ménagier De Paris*, circa 1393. Published as *The Goodman of Paris* by George Routledge and Sons, Ltd., London, 1928.

"For a quart of a quarter of hippocras by the measure of Beziers, Carcassonne, or Montpellier, take five dram of find cinnamon, selected and peeled; white ginger selected and pared 3 drams; of cloves, cardamom, mace, galingale, nutmegs, nard, altogether a dram and a quarter, most of the first and less of each of the others in order. Let a powder be made thereof, and with it put a pound and half a quarter (by the heavy weight) of lump sugar, brayed and mingled with the aforesaid spices; and let wine and sugar be set and melted on a dish on the fire, and mixed therewith; then put it in the strainer, and strain it until it runs clear red Note, that the sugar and cinnamon ought to predominate."

Adaptation: 5 tsp. ground cinnamon, 3 tsp. ground ginger
½ tsp. Each ground cloves, cardamom, mace, and nutmeg
¾ pound turbinado sugar
1 quart "red" wine

The wine chosen was a home-made cherry wine. The resulting hippocras was strained several times through cheesecloth. After tasting, additional wine was added and then all was bottled.

Duncan developed the following modern "steam beer" recipe, which makes a remarkably lager-like beer even though fermented at garage temperatures:

"Call it Steam Beer, Damn it!"

Category : California Common Beer
Starting Gravity : 1.045
Alcohol content : 4.4%
Recipe Makes : 6.0 gallons

Method: Full Mash
Ending Gravity: 1.011
Hop IBUs: 41.7

Malts/Sugars:

1.00 lb. Munich Light
0.50 lb. Crystal 40L
0.50 lb. Crystal 20L
0.50 lb. Crystal 60L
10.00 lb. Pilsner 2-Row

Hops:

1.00oz Cascade leaf 5.6% 30 min
1.00oz Cascade leaf 5.6% 5 min
1.50oz Northern Brewer 9.3% 60 min

Grain/Water Ratio: 1.25 quarts/pound
Strike: 3.91 gallons of water at 135F
For a first Mash Temperature: 125F
Second Mash Temperature: 155F
Boiling Water to add: 2.45 gallons

Water Absorbed by Grain: 1.25 gal
Water Evaporated during boil: 3.00 gal
Wort Left in Brewpot: 0.33 gal
Sparge: 4.25 gal to yield 6 gal of wort

Notes:

1. Add ½ tsp CaCl₂ to your (charcoal filtered) tap or bottled water. Used 120 F x 30 minutes, 140 F x 5 min (an unnecessary temperature step, but was the result of my particular brewing system), 145 F x 60 min, and 154 F x 30 min. Mash-out at 168 F for 10 minutes, if possible with your equipment, otherwise don't worry about a mash-out. Boil for 90 minutes.

2. Once chilled, pitch with WY Kolsch yeast at no higher of a temperature than 70 F, then place your carboy in an area where the temperature averages 65 F. (I used my garage plus set the carboy inside a large plastic bucket with about 8 inches of water in the bottom for evaporative cooling.)

3. Fermentation will take about 2 weeks, then let settle until able to rack into a clean carboy. Either keg or bottle with priming sugar. Tastes excellent at 2 weeks, reaches prime flavor after only one month of aging.

Well, that's all for this issue! Once again, I *need* your input and submissions... Thanks, and have a wonderful New Year!

Duncan Saxthorpe of Alnwick, G.A., O.P.



Brewers' Guild Leadership

Head of the Guild

Ursus Orík Warwick (Christopher Franklin)

5 [redacted] avenue, San Jose, CA 95128

(4 [redacted]
Private
No peeking

Cynaguan Representative

Josef zum Murmeltier (Robert Hambrick)

18 [redacted] e., Stockton CA 95204

(20 [redacted]
Private
No peeking
e-mail [redacted] teach.com

Mists Representative

Peyre de Barat (Leon Baradat)

1 [redacted] ayward CA 94541

(6 [redacted]
Private
No peeking
e-mail [redacted] n

Chronicler for the Guild

Duncan Saxthorpe of Alnwick (Bruce Ross)

24 [redacted] CA 94533

(7 [redacted] 5
Private
No peeking
e-mail [redacted]
N [redacted] ...

This newsletter is an unofficial publication prepared by and for the member of the Brewers' Guild of the Kingdom of the West. The articles, opinions, and recipes published herein are strictly the responsibility of their authors and not of the SCA or the Kingdom of the West. (Now that the lawyers are happy... relax and have a home brew!)