



# Gordon Biersch

BREWING COMPANY



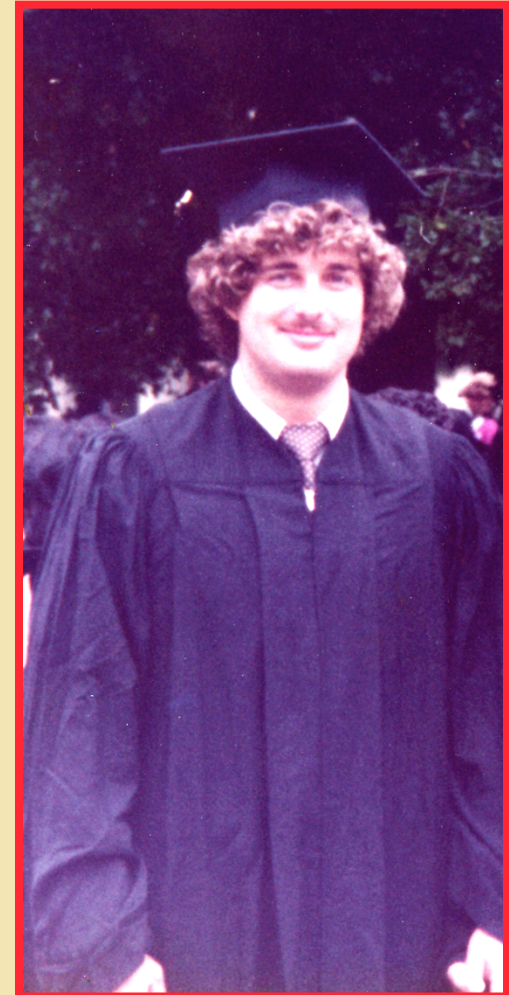
## Milestones in the Development of a Future Brewer

- Age 15\*
  - Toured Germany, Austria and Switzerland
    - Drank beer
- Age 17\*
  - Exchange Summer in Ried im Innkreis Austria
    - Neighbors owned a brewery
- Age 18\*
  - Bought every imported beer available at Liquor Barn

\* All performed under parental consent

## 1980-81 EAP Student in Göttingen, West Germany

- Summer job working in the engineering department of California Cannery and Growers.
- Enjoyed the manufacturing experience
- Thumbed through a catalogue of all of the majors at German Universities during exchange student year.
- Applied to the brewing engineering program at the Technical University of Munich, Weihenstephan. Accepted in June.
- Hands on brewing experience at AB in Fairfield Summer of 1982
- Began grad school at Weihenstephan in November, 1982.



UC Berkeley 1982

# School with a Brewery and a Beer Garden



# Our Brewing Culture Dates Back to 1040

**NEVER TRUST  
A SKINNY BREWER.**

Enjoy Gordon Biersch beer.  
Smooth, full-bodied beers for  
people who really love beer.  
Like me.

*Dan Gordon*

MÄRZEN • PILSNER • HEFEWEIZEN • BLONDE BOCK • WINTERBOCK • DUNKELWEIZEN • FESTBIER

- Brewed in accordance with the German Purity Law of 1516 (Reinheitsgebot)
- Imported Malted Barley
- Hallertau Aroma Hops from Bavaria
- Yeast from Bavaria produced at our brewery and used only once
- Our lagers are aged for 6 weeks: longer than any craft brewer in the country
- Naturally Carbonated

# What they teach you at Weihenstephan

- Nature has provided the enzymes to do the work naturally
  - Malting
  - Mashing
  - Fermentation
- Yeast selection, propagation and management is tantamount to good beer
- Energy conservation is something that should be engineered up front and not as an afterthought
- Temperature Control is critical throughout every stage of production.
- It's all about sterility and a lot of that comes down to how the brewery is engineered, built as well as operated.

# What they teach you at Weihenstephan

- Mashing
  - Graduated Step Infusion or Decoction
    - Protein level and modification levels of the malt
    - Protein fractionation between low, middle and large molecular structures
    - Amount of dark, caramel or crystal malt Over 25% leads to decoction. Also for wheat beers.
  - Protein Rest
    - Dialed in based on FAN levels.
    - Ranges between 5 minutes and 25 minutes at 52 and 62 C
  - Amylase Rests
    - Sugar yield
    - Ranges between 20 and 30 minutes at 68 and 72 C
  - Mash out at 78C to deactivate the enzymes
  - Hops 3% alpha Hallertau 1.5 g/l of wort for a 30 IBU Pils.

# Translating Weihenstephan to Home Brewing

- Hot Break Removal, Cooling and Aeration
  - Decant as thoroughly as possible
  - Cool as quickly as possible (less than 45 minutes) to a temp 2 degrees below fermentation temp.
  - Aerate vigorously by shaking. O<sub>2</sub> injection is not necessary and create too high of a content that can kill the yeast.
- Yeast
  - Feed it once you receive it and keep it fed and growing
    - Save some sterile wort. Boil and cool it.
  - Get a microscope and make yeast your hobby.
    - Use a hemocytometer and count cells before pitching
- Rig your fridge with a thermostat that can control to a tolerance of 1-2 degrees C
- Cornelius Cannisters for Aging
  - Rig it up with a pressure guage and maintain at 9 PSI.
  - Have bottom of pipe 2" short of reaching the bottom

# Gordon Biersch Company History



- Brewery Restaurant Concept
- On Site brewing German Style Lagers
- Upscale Interior
- Eclectic Cuisine
- Dean Biersch Restaurateur
- Dan Gordon Brewer



**1988 Palo Alto, California**



# Taiwan



# The Brewery





# Beer Styles



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# Märzen



- 55% 2 Row LP Pilsner Malt
- 42% Munich
- 3% Caramunich
- Decoction Mash 40C, 52C, 62C, 68C
- 72C, Pull 25% Boil for 10, Remix.
- OG 13-14%
- Hops: Hallertau MF,  $\frac{3}{4}$  boil begin,
- Yeast 34/70
- 7 days 9C, DA rest
- Degree a day to 0C
- Alcohol volume 5.8%; bitterness



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# Czech Style Pilsner



- 93%-100% Pilsner Malt
- Up to 7% Carapils
- Up to 3% Malted Wheat
- Graduated Step Infusion Mash
- 52C, 62C, 68C, 72C Mash out 78
- OG 11-12%
- Ferment 7 days 9C
- Age 2 weeks 4C
- Age 4 weeks 0C
- Hops: Hallertau Aroma, Tettnang, Spalt and Saaz
- Alcohol volume 5.4%; bitterness 30 IBU.





# Blonde Bock



- 90% Pilsner Malt, 5% Munich, 5% Carapils
- Graduated Step Infusion Mash
- OG 17%
- Hopped with Hallertau and Tettnang
- Classic Lager Fermentation
- Alcohol volume 7%; bitterness 23 IBU.



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# Hefeweizen



55% Malted Wheat, 3% Carmalized Malted Wheat, 42% Pilsner Malted Barley

Single Decoction Mashing

52 C 30 minutes

62 C 30 minutes

68 C 30 minutes

72 C for 20 minutes

Boil 20 % of the volume for 10 minutes

Mash out

Hallertau Hersbrucker Hops

1 hour 20 minute boil

Cool to 18 C

Weihenstephan 68 Yeast

Ferment at 20 C

Age for 1 week at 10 C

Age for one week at freezing

Alcohol volume 5.5%; bitterness 12 IBU



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# Maibock



- 50% Pilsner Malt
- 45 % Munich
- 5 Caramunich
- Decoction Mash same as märzen
- 17.5% OG
- Hallertau Tradition and Tettnang Hops
- 2/3 boil begin, 1/6 10 minutes before kock out and 1/6 at knock out.
- Cool to 7 C
- Pitch 18 M cells/ml W34/70
- Classic Lager Fermentation and Aging

Alcohol volume 7.3%; bitterness 25 IBU.

# SommerBrau Kölsch



- 80% Pilsner Malt, 20% Malted Wheat
- Graduated Step Infusion Mash
  - 52 C 30 minutes
  - 62 C 20 minutes
  - 68C 20 Minutes
  - 72 C 25 minutes
- OG 10.8%
- Hallertau and Tettnang Hops
- Weihenstephan Kölsch Yeast
- Cool to 13C
- Ferment at 15 C for 5 days
- Age for 1 week at 6C
- Age for 2 weeks at 0C



# FestBier



- 75% Pilsner Malt 20% Munichmalt, 7% Carapils, 2% Caramunich Munich
- Decoction Mashing Program
- 13% OG
- Hallertau and Tettnang Hops
- 70% BB, 15% 10 min before end of boil, 15% at casting
- Cool to 7C, Classic Lager Fermentation and Aging
- Weihenstephan 34/70 Yeast

# Doppelbock



- 50% 2 Row LP Pilsner Malt
- 44% Munich
- 5% Caramunich
- 1% Carafa
- .1% Black Malt
- Decoction Mash 40C, 52C, 62C, 68C
- 72C, Pull 25% Boil for 10, Remix.
- OG 19% (as high as 22%)
- Hops: Hallertau MF,  $\frac{3}{4}$  boil begin,
- Yeast 34/70
- 9 days 9C, DA rest at 6C for 4 days
- 2 weeks at 4C, 3 weeks at OC
- Alcohol volume 7.5%; bitterness 27



# Dunkelweizen



- 20% 2 Row LP Pilsner Malt
- 40% Dark Wheat (Weyerman)
- 5% Carawheat (Weyerman)
- Decoction Mash 40C, 52C, 62C, 68C
- 72C, Pull 25% Boil for 10, Remix.
- OG 13% (as high as 22%)
- Hops: Hallertau MF,  $\frac{3}{4}$  boil begin,
- Weihenstephan W68 (4M cells/ml/)
- 3 days 20C, DA rest at 10C for 4 days
- 2 weeks at 0C,
- Alcohol volume 5.6%; bitterness 16




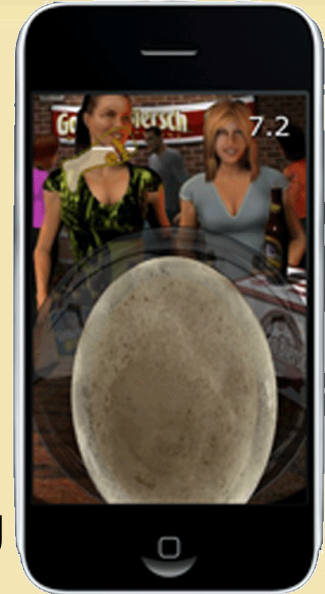
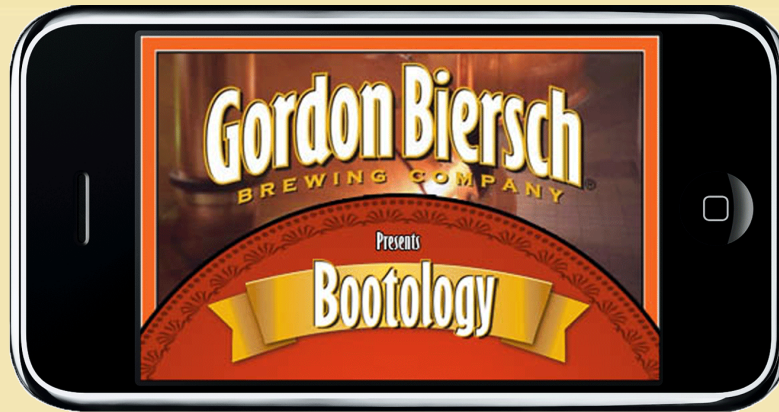
# Garlic Fries



# Überbier Promotions



# Gordon Biersch Bootology Game



Bootology is a free virtual I-application boot drinking game you can download onto your iPhone, iPod Touch or iPad. The game is based on the centuries old German fraternity tradition of boot drinking. The goal is to empty the boot in less than 30 seconds while rotating the tip of the boot up at just the right time without splashing the beer all over your face. The boot game can be integrated with on premise promotions and use of the Gordon Biersch 2L glass boot.

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# Hoppotomus Maximus



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