

# Welcome to the beer brewing workshop

at BruCON 2011

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Presented by

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## Overview of the brewing processes

- Preparing the grains
- Mashing
- Extracting
- Cooking
- Filtering
- Fermentation
- Bottling

## What do you need?

Make sure you have the following items **before**  
you start brewing!

## Ingredients

- For +/- 40 liter:
  - Malt: grains of wheat, oats, barley, ... : 3,5kg
  - Oat or barley malt flakes: 250g
  - Hops: flower or pellets: 30-60g
  - Sugar, honey, cane sugar, brown sugar (optional): 1kg
  - Baker's yeast or brewer's yeast: 10g
  - Pure water, warm (starting from 40-45 degrees Celsius, will be heated more later): a lot!

## What tools do you need?

- Tools for crushing/preparing:
  - Mill
  - Scales
  - Container/bowls
  - Large cooking pot

## What do you need? (2)

- Cooking stuff for mashing:
  - Kettle min. 25 liter
  - +/- 12 liter of warm water min. 40 degrees
  - Cooking fire
  - Spoon
  - Timer
  - Thermometer

### What do you need? (3)

- Cooking stuff for extracting:
  - +/- 30 liter of warm water at 65-70 degrees
  - Containers, buckets

### What do you need? (4)

- Cooking stuff for cooking
  - See mashing

### What do you need? (5)

- Cooking stuff for filtering:
  - Can
  - Funnel with built-in fine filter (optional)
  - Sieve
  - "Dame Jeanne" or yeasting container
  - Streaming cold water for rinsing tools

### What do you need? (6)

- Cooking stuff for yeasting:
  - Cup
  - Small funnel
  - Waterlock
  - Rubber sealing plug
  - Lukewarm water

### What do you need? (7)

- Cooking stuff for bottling:
  - Container with robin
  - Spoon
  - Scales
  - Bottles + corks
  - Disinfectant, warm water, large container

### What do you need? (8)

- Always needed:
  - Dish cloth
  - Mop, floor cloth
  - Soap
  - Patience
  - Beer
  - Cheese (optional)

## The process (again)

- Crushing
- Mashing
- Extracting
- Cooking
- Filtering
- Fermentation
- Bottling

## Crushing

- Take half of the grains and crush them in a mill – or order crushed grains, but these will only keep for max. 2 weeks.
- The other half of the grains goes untouched into the mashing container.
- Flakes are precooked during for 30 minutes.

## Mashing

- 1-step mash: soak grains and flakes in hot water (65-67) degrees for 1 hour.
- Or multi-rest: start at 40 degrees, wait 15', heat to 45 degrees, wait 15', heat to 50 degrees, etc, until 65 degrees is reached, wait for 1 hour.

## Extracting

- Filter the mash in your contraption of choice
- Rinse with hot water
- Catch all the liquid (wort) in a large kettle that can be put on a cooking fire.
- Feed grains to chickens.

## Cooking

- Bring the wort to the boil.
- Await the hot break.
- Add bitter hops and (optionally) sugar/honey.
- Cook for 30-45 minutes.
- Add aroma hops.
- Cook for another 15 minutes.

## Filtering/cooling

- Cool the cooked wort as fast as possible. Avoid contamination!
- When it is under 33 degrees, fish out the hops and transfer to a disinfected fermentation container.

## Fermentation

- Add +/- 0,5g/l dry yeast, or 1g/l fresh yeast.
- Put water lock on container.
- Wait 10-14 days.

## Bottling

- Disinfect bottles
- Transfer beer to bottles, optionally adding 1g/20l yeast and/or 4g/l sugar.
- Cap bottles

## Last but not least: drinking!

- Rinse enough glasses to hold content of an entire bottle.
- Pour out bottle without swinging.
- Don't drink "fond" unless you suffer from severe intestin blockades.
- If you need to move the beer: wait 4-5 days before pouring.

## Questions?

Can I have your presentation?

I need explanations in Dutch/French, help!

Do you do bachelor parties/weddings/baptisms?

Where is the recipe?

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