

# BROKEN SPEAR BITTER

Official NORTHERN BREWER Instructional Document

With a bantamweight ABV of only 3.4%, Broken Spear is modeled on a world-class standard bitter from the town of Oxfordshire in the Thames Valley. It arrives in the pint glass with a tawny color and fine, short-lived bead (because we don't want to waste that volume on foam, now, do we?). A true session beer that showcases fat, juicy malt ahead of snappy bitterness, and subtle tropical fruit behind a blend of fragrant, resinous hops. Dry hopping adds layers of earth and new-mown hay to the restrained fruitiness of the nose. Low alcohol? Yes. Bland? Oh heavens no. Serve at cellar temperature with fish and chips or a nice chunk of Stilton or Cheddar.

**O.G.: 1.035 READY: 4 WEEKS**

2 weeks primary, 2 weeks bottle conditioning

## KIT INVENTORY:

### MAILLARD MALTS™ SPECIALTY GRAIN

- 0.25 lbs English Dark Crystal
- 0.125 lbs English Black Malt

### MAILLARD MALTS™ EXTRACTS & OTHER FERMENTABLES

- 4 lbs Munton's Light DME (60 min)

### HOPTIMUS REX™ PREMIUM HOPS & OTHER FLAVORINGS

- 1 oz UK Fuggle (60 min)
- 0.5 oz UK Kent Goldings (60 min)
- 0.5 oz UK Kent Goldings (15 min)
- 0.5 oz Styrian Goldings (Celeia) (15 min)
- 0.5 oz Styrian Goldings (Celeia) (dry hop - 7 days)

## YEAST

- **WYEAST 1882 THAMES VALLEY ALE II.** Slightly fruitier and more malty on the palate than 1275. Well balanced with a clean, dry finish. The source of 1275 and 1882 uses them together to produce a highly complex flavor profile and spicy character. Apparent attenuation: 72-78%. Flocculation: high. Optimum temp: 60-70° F.

These simple instructions are basic brewing procedures for this Northern Brewer extract beer kit; please refer to your starter kit instructions for specific instructions on use of equipment and common procedures such as siphoning, sanitizing, bottling, etc. For more detailed extract brewing instructions, please visit [www.northernbrewer.com](http://www.northernbrewer.com)

## BEFORE YOU BEGIN ...

### MINIMUM REQUIREMENTS

- Homebrewing starter kit for brewing 5 gallon batches
- Boiling kettle of at least 3.5 gallons capacity
- Approximately two cases of either 12 oz or 22 oz pry-off style beer bottles

## UNPACK THE KIT

- Refrigerate the yeast upon arrival
- Locate the Kit Inventory (above) - this is the recipe for your beer, so keep it handy
- Doublecheck the box contents vs. the Kit Inventory
- Contact us immediately if you have any questions or concerns!

## PROCEDURE

### A FEW DAYS BEFORE BREWING DAY

1. Incubate yeast. Remove the yeast from the refrigerator, and "smack" as shown on the back of the yeast package. Leave it in a warm place (70-80° F) to incubate until the pack begins to inflate. Allow at least 3 hours for inflation; some packs may take up to several days to show inflation. Do not brew with inactive yeast - we can replace the yeast, but not a batch that fails to ferment properly.

### ON BREWING DAY

2. Collect and heat 2.5 gallons of water.

3. For mail-order customers grains for extract kits come crushed by default, but if you requested uncrushed grains, crush them now. Pour crushed grain into supplied mesh bag and tie the open end in a knot. Steep for 20 minutes or until water reaches 170°F. Remove bag and discard.

4. Bring to a boil and add the 4 lbs Munton's Light dried malt extract. Remove the kettle from the burner and stir in the Light DME.

5. Return wort to boil. The mixture is now called "wort", the brewer's term for unfermented beer.

- Add 0.5 oz UK Kent Goldings and 1 oz UK Fuggle hops and boil for 60 minutes.

- Add 0.5 oz UK Kent Goldings and 0.5 oz Styrian Goldings (Celeia) 15 minutes before the end of the boil.

6. Cool the wort. When the 60-minute boil is finished, cool the wort to approximately 100° F as rapidly as possible. Use a wort chiller, or put the kettle in an ice bath in your sink.

7. Sanitize fermenting equipment and yeast pack. While the wort cools, sanitize the fermenting equipment - fermenter, lid or stopper, fermentation lock, funnel, etc - along with the yeast pack and a pair of scissors.

8. Fill primary fermenter with 2 gallons of cold water, then pour in the cooled wort. Leave any thick sludge in the bottom of the kettle.

9. Add more cold water as needed to bring the volume to 5 gallons.

10. Aerate the wort. Seal the fermenter and rock back and forth to splash for a few minutes, or use an aeration system and diffusion stone.

11. Measure specific gravity of the wort with a hydrometer and record.

12. Add yeast once the temperature of the wort is 78°F or lower (not warm to the touch). Use the sanitized scissors to cut off a corner of the yeast pack, and carefully pour the yeast into the primary fermenter.

13. Seal the fermenter. Add approximately 1 tablespoon of water to the sanitized fermentation lock. Insert the lock into rubber stopper or lid, and seal the fermenter.

14. Move the fermenter to a warm, dark, quiet spot until fermentation begins.

### BEYOND BREWING DAY, WEEKS 1-2

15. Active fermentation begins. Within approximately 48 hours of Brewing Day, active fermentation will begin - there will be a cap of foam on the surface of the beer, the specific gravity as measured with a hydrometer will drop steadily, and you may see bubbles come through the fermentation lock. The optimum fermentation temperature for this beer is 60-70° F - move the fermenter to a warmer or cooler spot as needed.

16. Active fermentation ends. Approximately one week after brewing day, active fermentation will end. When the cap of foam falls back into the new beer, bubbling in the fermentation lock slows down or stops, and the specific gravity as measured with a hydrometer is stable, proceed to the next step.

17. Add the dry hops. Add 0.5 oz Styrian Goldings (Celeia) hops to the primary fermenter 7 days before bottling day.

### BOTTLING DAY—ABOUT 2 WEEKS AFTER BREWING DAY

18. Sanitize siphoning and bottling equipment.

19. Mix a priming solution (a measured amount of sugar dissolved in water to carbonate the bottled beer). Use the following amounts, depending on which type of sugar you will use:

- Corn sugar (dextrose)  $\frac{2}{3}$  cup in 16 oz water.
- Table sugar (sucrose)  $\frac{5}{8}$  cup in 16 oz water.

Then bring the solution to a boil and pour into the bottling bucket.

20. Siphon beer into bottling bucket and mix with priming solution. Stir gently to mix—don't splash.

21. Fill and cap bottles.

### 2 WEEKS AFTER BOTTLING DAY

22. Condition bottles at room temperature for 2 weeks. After this point, the bottles can be stored cool or cold.

23. Serving. Pour into a clean glass, being careful to leave the layer of sediment at the bottom of the bottle. Cheers!