

SUSTAINOR NONTRADITIONAL BOCK

Official NORTHERN BREWER Instructional Document

This strong, dark, late-hopped, dry-hopped, wheat- and rye-incorporating lager was formulated by the Northern Brewer Civilian Brewing Division as a fermentative counterattack to the long, gray slog of the last half of winter. Almost a bock but suffering an acute case of craft beer attitude, Sustainor is like a down-filled parka for your taste buds. Besides making liberal use of Munich malt to achieve rich, breadly overtones and warming sensations, Sustainor gains grainy goodness, heightened foam stands, intense garnet-brown color, and even a hint of chocolate aromatics from rye and wheat malts of various roast levels. Hop additions of 100% Sterling from boil through secondary fermentation impart a beguiling combination of earthy and spicy aromatics, leaving the imbiber with the impression that in his or her pint the hoppy head of an IPA was grafted onto the sustaining body of a Bavarian lager. NOTE: Due to a shortage of Munich malt syrup, this kit will be using Amber malt syrup for January. Amber malt syrup is made partly from Munich malts and is a good substitute.

O.G.: 1.062 READY: 2 MONTHS

2 weeks primary, 4 weeks secondary, 2 weeks bottle conditioning

KIT INVENTORY:

MAILLARD MALTS™ SPECIALTY GRAIN

- 0.5 lbs Weyermann Carawheat
- 0.25 lbs Weyermann Chocolate Rye
- 0.25 lbs Weyermann CaraMunich I

MAILLARD MALTS™ EXTRACTS & OTHER FERMENTABLES

- 3.15 lbs Munich malt syrup (60 min)
- 6 lbs Munich malt syrup late addition (15 min)
- NOTE: Due to a shortage of Munich malt syrup, this kit will be using Amber malt syrup for January. Amber malt syrup is made partly from Munich malts and is a good substitute.

BOIL ADDITIONS

- 1 oz Sterling (60 min)
- 1 oz Sterling (30 min)
- 1 oz Sterling (10 min)
- 1 oz Sterling (dry hop)

YEAST

- **WYEAST 2487 HELLA-BOCK.** Beers fermented with this strain will benefit from a temperature rise for a diacetyl rest at the end of primary fermentation. Apparent attenuation: 70-74%. Flocculation: medium. Optimum temp: 48°-56° F.

BEFORE YOU BEGIN ...

MINIMUM REQUIREMENTS

- Homebrewing starter kit for brewing 5 gallon batches
- Boiling kettle of at least 3.5 gallons capacity
- A 5 gallon glass carboy, with bung and airlock, to use as a secondary fermenter
- 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. Remove the liquid Wyeast pack 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. If you are using dry yeast, no action is needed.

2. Prepare a yeast starter. Follow the Yeast Starter Kit instructions. Allow the starter to incubate for at least one day.

ON BREWING DAY

3. Collect and heat 2.5 gallons of water.

4. 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.

5. Bring to a boil and add 3.15 lbs Munich malt syrup (or Amber, if you received Amber). Remove the kettle from the burner and stir in the Munich malt syrup.

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

- Add 1 oz Sterling hops, and boil for 60 minutes.
- Add 1 oz Sterling hops 30 minutes before the end of the boil.
- Add 6 lbs Munich malt syrup (or Amber, if you received Amber) 15 minutes before the end of the boil.
- Add 1 oz Sterling hops 10 minutes before the end of the boil.

7. Cool the wort. When the 60-minute boil is finished, cool the wort as close to 56° F as rapidly as possible. Use a wort chiller, or put the kettle in an ice bath in your sink.

8. 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.

9. 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.

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

11. 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.

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

13. Add yeast once the temperature of the wort is as close to 56°F as possible. Use the sanitized scissors to cut off a corner of the yeast pack, and carefully pour the yeast into the primary fermenter.

14. 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.

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

BEYOND BREWING DAY, WEEKS 1-2

16. 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 48-56° F - move the fermenter to a warmer or cooler spot as needed.

17. Active fermentation ends. Approximately two weeks 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.

18. Transfer beer to secondary fermenter. Sanitize siphoning equipment and an airlock and carboy bung or stopper. Siphon the beer from the primary fermenter into the secondary.

BEYOND BREWING DAY— SECONDARY FERMENTATION

19. Lagering. Slowly lower the temperature of the beer to as close to 35-40° F as your equipment allows. The best method is to lower the temperature by a couple of degrees each day until the target temperature is reached. Allow the beer to condition in the secondary fermenter for 4 weeks before proceeding with the next step. Timing now is somewhat flexible.

20. Add the dry hops. Add 1 oz Sterling hops to the secondary fermenter 5 days before bottling day.

BOTTLING DAY—ABOUT 6 WEEKS AFTER BREWING DAY

21. Sanitize siphoning and bottling equipment.

22. 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.

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

24. Fill and cap bottles.

2 WEEKS AFTER BOTTLING DAY

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

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