

Instructions for brewing the extract version of

Whale Arrow I.P.A.

- 1) Sanitize your fermenter (either a carboy, stopper and blow-off tubing or plastic bucket, lid and airlock) with a no-rinse cleanser or other properly-diluted sanitizing chemical.

1# Crystal 40L, 8 oz Biscuit malt

- 2) Steep grains in 2 – 2½ gallons of water in your brew pot at 155°F for 10-15 minutes. Remove and rinse.

3.3# Light LME, 3# Light DME

- 3) Bring brew pot to boil. Remove from heat. Add malt extract (and any other sugars and/or water treatments, but do not add your priming/bottling sugar). Stir until everything has dissolved. Return to heat.

1½ oz Nugget hop pellets (19.5 AAU)

bittering hop for full hour.

1 oz Kent Goldings pellets (4.5 AAU)

flavor hop for last 15 min of boil.

½ tsp Irish moss

last 15 min of boil.

1½ oz Kent Goldings pellets

aroma hop for last 5 min of boil.

- 4) Boil above ingredients (wort) for a total of one hour. Add hops throughout the boil as indicated.
- 5) Turn off heat. In order to help cool down the wort, take your brew pot off the stove and cover it to avoid splashing. Immerse it in a sink partially filled with ice-water and swirl the pot occasionally. Chill until the bottom of the pot is cool to the touch when removed from the ice water bath.
- 6) Fill your sanitized fermenter with approximately 2 gallons of room temperature water. It is important that you add the water to the fermenter first when using a glass carboy since the glass can crack when subjected to extreme temperature changes.
- 7) Splash the wort into the fermenter while straining out the hop trub. Splashing will help dissolve some air into the wort. Top up to 5 gallons with room temperature water.
- 8) Immediately add (pitch) your yeast when the wort is at or below 78F (when the fermenter no longer feels warm to the touch).
- 9) If using a carboy, attach stopper and blow-off tubing and run the other end into water in a container to collect excess foam (blow-off). Make sure stopper is dry so that it creates a firm seal in the neck of the carboy. After blow-off has subsided (24-48 hours.) replace tubing with a sanitized airlock 1/2 full of water. If fermenting in a plastic bucket, attach lid and airlock 1/2 full of water.

We recommend Nottingham dry yeast.

For liquid yeast, try White Labs 005 or Wyeast 1098.

- 10) Ferment in a dark place. Fermentation should start within 48 hours and finish within 3-10 days or up to 50 days at colder temperatures (Ale yeast is best used between 63F-75F. Lager yeast is best used at 42F-58F). We recommend a total of two weeks to ferment an ale and six for a lager.
- 11) To be sure fermentation is complete siphon off enough beer to fill your hydrometer flask and float your hydrometer in it. A specific gravity higher than the range above indicates incomplete fermentation. The beer is not safe to bottle.
- 12) Sanitize your siphon, bottles and bottling bucket as indicated in step #1 above. Be sure to sanitize your caps!
- 13) Boil (priming sugar) in one cup of water for 5 minutes and splash into your bottling bucket.

¾ cup (5 oz) priming sugar or 1 ¼ cups (8 oz) of DME

- 14) Siphon beer from fermenter to bottling bucket. Avoid taking up yeast from fermenter and splashing beer in bottling bucket. Gently stir with the end of the siphon tube to mix in the priming sugar.
- 15) Fill bottles from spigot, leaving 1/2" to 1" airspace and cap. A bottle filler does this best.
- 16) Store bottles upright in dark place at fermentation temperature for at least two weeks.
- 17) Drink the beer. Repeat.

At A Glance:

Original Gravity:
1.059
(1.053 - 1.062)

Terminal Gravity:
1.014
(1.012 - 1.015)

Color:
11 SRM
Copper to Red/Light
Brown

Bitterness:
47 IBU

Alcohol:
6.0 % A.B.V.
4.8 % A.B.W