

Golden Eagle Scotch Ale 1 Gallon Extract Kit

1 If your kit has **liquid yeast**, put it in the refrigerator as soon as possible.

The golden eagle is a national icon in Scotland. The Golden Eagle Scotch Ale will be an icon in your household. Your taste buds will enjoy a powerful, sweet malt character that is balanced with some roastiness and just enough hop presence to keep this beer from being one-dimensional.

This sweet, malt forward brew will be good right away or will also benefit from aging, if you have the patience to wait it out. Cheerio!

Calculated Appx.: O.G.: 1.066 F.G.: 1.019 ABV: 6.1 % IBU: 25 SRM: 21

Kit Ingredients

- 1 lb amber dry malt extract
- Steeping grains: 12 oz US 2-Row, 1 oz UK Amber, 1 oz US Munich 10, 2 oz US Caramel 80L, 1 oz Belg. Biscuit, 1 oz US Chocolate malts
- 1 oz Hersbrucker hop pellets (2% AA) (34 oz @ 45 min, 14 oz @ 15 min)

- Large muslin sack for steeping grain
- ~40 Carb Tabs (for bottling)
- Dry yeast S-04 or liquid upgrade (Wyeast 1728 or WLP028)

Please make sure that your kit contains these items. Please call us at 608-257-0099 before brewing if any item is missing. Thanks!

Directions

Sanitize everything well! Remember to stir periodically throughout the boil!

- 1. Fill your kettle with 2.5 quarts of water and heat it to 160F. Pour crushed **grain** into the grain sack, tie it closed, and place it into your kettle. Mash the grains for 45 minutes.
- 2. While your grains are mashing, heat 2.5 quarts of water to 170F in a separate pot. After the mash, **remove the grains** from the mixture and sparge (rinse) the grains with the 2.5 quarts of hot water, collecting the runnings in your boil kettle.
- 3. Add 1.25 quarts of water to your boil kettle and turn on the heat and bring the mixture to a boil.
- 4. Turn the heat off, add the **Amber dry malt extract**, and mix the extract into the water. Turn the heat back on and bring the mixture to a boil. You will be boiling the mixture, called wort, for a total of 45 minutes. However, keep reading, because you'll be adding hops during that time.
- 5. Upon initial boil, the wort may foam up (called a "hot break"). If this happens, reduce the heat until the foam recedes, then turn up the heat, bring back to a boil, and maintain a rolling boil. Start your 45 minute timer at this point in the brewing process, add ¾ oz of Hersbrucker hop pellets and boil the wort for 30 more minutes. This hop addition will impart the bitterness to your beer.
- 6. After 30 minutes, it's time for another hop addition. Add ¼ oz Hersbrucker hops and boil for 15 more minutes.

- 7. After 45 minutes, you are now done boiling your beer, so it's time to turn off the heat.
- 8. Sanitize fermentor, stopper, and air lock with sanitizing material according to its directions.
- 9. Cool your hot wort down to around 65-70F and add the wort to the fermenter. You should have around 4/5ths gallon to a gallon of liquid in the fermenter (just at or below the "One Gallon" raised lettering on your glass jug). Aerate the wort as best you can. If you have an oxygen system, that's best, otherwise give the wort a good shake or a good stir with a sanitized metal or plastic spoon. This is also a good time to take a hydrometer reading. The number from this reading is your starting gravity. Add 1/3 of the beer yeast packet.
- 10. Seal your fermentor. Attach the fermentation lock half filled with water. Ferment at 65°-72°F for around 14 days. Note that it can take up to 48 hours for active fermentation to be visible. If you don't see any activity in the air lock or foam on the surface of beer after 48 hours, call us at 608-257-0099.
- 11. If foam, called krausen, is going up into the airlock during fermentation, carefully remove the airlock and replace it with a short length of 5/16" tubing that leads to a container ½ filled with water or sanitizer (sanitize the tubing, called "blow-off tubing"). Make sure that the tip of the tubing in the overflow container is submerged. When fermentation slows down, replace the blow-off tube with the airlock. Sanitize the airlock before putting it back in the stopper.
- 12. Now you can go ahead and bottle or keg your beer. Whether you bottle or keg, sanitize everything that will contact the beer during packaging, including bottles, caps, kegs, siphon tubing, bottle filler, etc. Also, now is a good time to take a hydrometer reading. This would be your beer's final gravity.
- 13. **Bottling**, Siphon beer into sanitized bottles. Add three conditioning tablets to each bottle for low carbonation, four for medium, and five for high carbonation. Cap and turn bottles upside down several times to mix in sugar
- 14. Store upright at room temperature (\sim 70F) for 14 days to carbonate. Beer may then be stored at cooler temperatures to age. Beer may be consumed at any time, though it will continue to improve for several months.