

## #95: Devil Dog (India Pale Ale)

CHRIS SWINGLEY (26-DEC-2015)

Named for our dog, Kiva, who we called devil dog because of her dark fur, bright blue eyes, and mischievous personality.

RECIPE (for NaN gallons final volume)

9½ pounds	(58%)	Crisp Maris Otter Pale Malt (conditioned, gap 0.9 mm)
3 pounds	(18%)	Briess 6-Row Malt
3 pounds	(18%)	Briess Rye Malt
1 pound	(6%)	Briess Crystal 80L
1 ounce		Northern Brewer pellet hops, 6% AA (first wort hop)
2¼ ounces		German Herkules pellet hops, 15.7% AA (60 minutes)
2 ounces		UK Fuggles pellet hops, 4.3% AA (2 minutes)
¾ ounces		Willamette pellet hops, 5.2% AA (2 minutes)

Safale US-05 dry yeast, pitched at 68°F

Starter: Pitched onto yeast cake from previous recipe (Cream Ale)

Aeration: Drill aerator for two minutes after pitching

### WATER

- + Fairbanks city water
- + 40¼ quarts water treated with:
  - 1 Campden tablet. Removes chlorine ion and chloramine, reduces oxidation
- + 19¾ quarts mash water treated with:
  - 4½ ml 88% Lactic Acid

### MASH

- + 19¾ quarts water @ 167°F, grist ratio of 1.2 quarts:pound @ 151°F (Held 90 minutes). 149°F at the end of the mash.

### SPARGE

- + 8½ quarts water @ 210°F, drain
- + 12 quarts water @ 168°F, drain
- + Vorlauf 1½ q wort after each addition.

### BOIL

- + Boiled 8 gallons for 90 minutes to yield 5¾ gallons wort
- + Wort prepared Saturday afternoon, boiled the next day. First wort hops remained in the wort overnight.
- + Hard to maintain a steady boil with outside temperatures near -20°F.

### FERMENTATION

- + Primary: bucket, 7 days, 64°F. Temperature range 62–68°F
- + Secondary: keg, 14 days, 64°F

### PACKAGING

- + Kegged at 8 psi, 50°F (1.8 volumes CO<sub>2</sub>)
- + Conditioned for 8 weeks
- + ready to drink on 20-feb-2016

PROPERTIES

Starting Gravity: 1.080	Final Gravity: 1.020
Original Extract: 19.3°Plato	Apparent Extract: 5.1°Plato
	Real Extract: 7.8°Plato
Alcohol: 7.9% by volume	Alcohol: 6.1% by weight
Apparent Attenuation: 73.8%	Mash Efficiency: 70%
Bitterness: 106 IBU	Color: 14°SRM
BU:SG: 1.32	BV: 2.77