

The fisheries staff, with assistance from local volunteers, Trout Unlimited members, Great Smoky Mountains National Park (GRSM) interns and a group of outdoor writers, ranging in age from 7 to 82, conducted population monitoring surveys on the lower 3 miles of Lynn Camp Prong June 22, 24 and 25. Electrofishing surveys on Lynn Camp and a tributary (Marks Creek) indicate brook trout populations are at (15 kg/ha) or exceeding (>34 kg/ha) pre-treatment biomass of rainbow trout at all 5 sites. The data indicate there are now between 1,392-5,616 brook trout per mile of stream on Lynn Camp Prong. The upper end of the biomass range (>35 kg/ha) would be considered exceptional in terms of trout abundance for any GRSM stream. Both 2014 and 2015 produced excellent year classes of young-of-year (YOY) brook trout, which means there will be good numbers of adults in the next 2-3 years. In fact, YOY fish comprised 53% of the total brook trout catch across all sites. Of the adults collected in all sites, 23% were greater than 7 inches with good numbers of fish >8 inches. Catch rates of anglers have been reported in the 20-40 fish per hour range with the highest catch rates being reported farther from the trailhead.

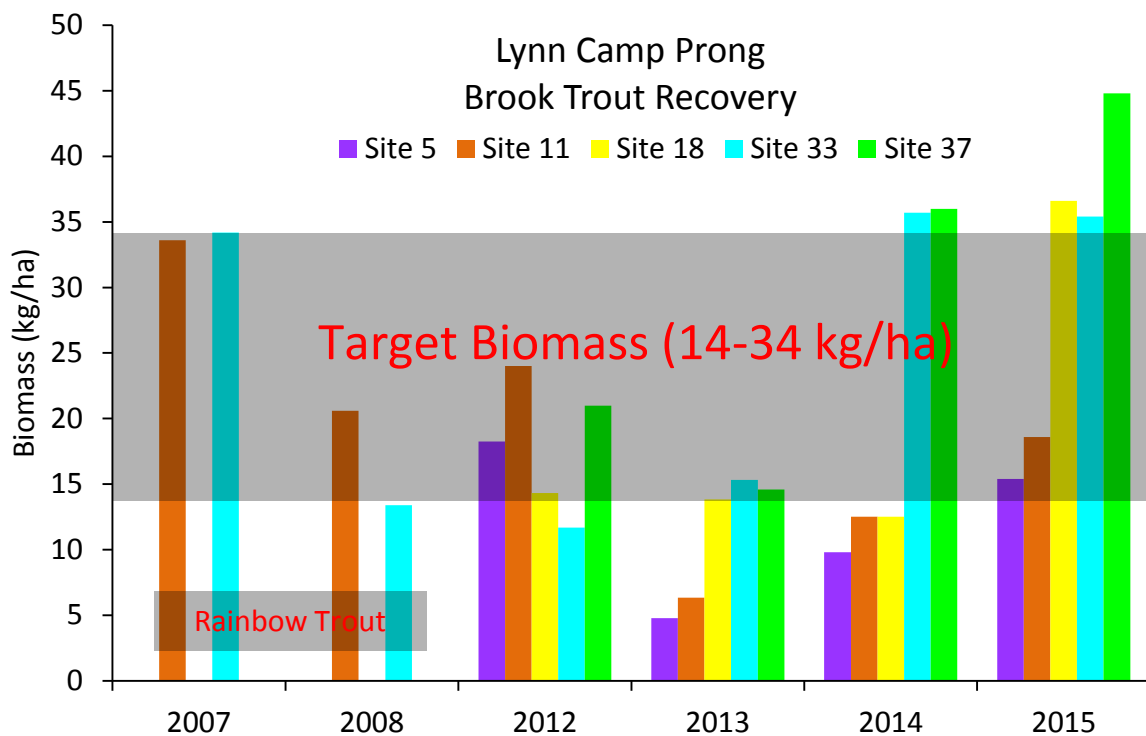


Figure 1.— Biomass of pre-treatment rainbow trout and post-treatment brook trout after restoration of 8.5 miles of Lynn Camp Prong, GRSM using the fish piscicide antimycin. The pre-treatment biomass of rainbow trout was used as a recovery target for the newly established brook trout population. Each site number represents 100m increments from the barrier falls.