

# Overview of Rainbow Trout Stocking in Pennsylvania

## Goal of the Pennsylvania Fish and Boat Commission's stocked trout program:

**Provide high quality recreational trout angling opportunities over a much broader area of the Commonwealth than could be provided by the wild trout resource alone**



## Trout Stocking Overview

Pennsylvania is home to some of the best trout fishing in the world! Wild and stocked Brook Trout, Brown Trout and Rainbow Trout (including steelhead and golden rainbow) swim in Pennsylvania waters. In addition, Lake Trout occur in Lake Erie, Raystown Lake, and the East Branch Clarion River Dam. To provide high quality recreational trout angling opportunities over a much broader area of the Commonwealth than could be provided by the wild trout resource alone, the Pennsylvania Fish and Boat Commission (PFBC) stocks about 3.2 million adult trout each year from its eight trout hatcheries. During 2019, 1,056 stream sections totaling 4,600 miles and 127 lakes totaling 6,950 acres were stocked with trout. Currently, the PFBC stocks about 65% Rainbow Trout, 21% Brown Trout, and 14% Brook Trout. Cooperative Nurseries, which the PFBC partners with and provides fingerling trout to grow into adults for stocking the following year, stocks an additional 1 million trout each year into Pennsylvania waters. Currently, Cooperative Nurseries stock about 48% Rainbow Trout, 32% Brown Trout, and 20% Brook Trout.

## Why has the PFBC and Cooperative Nurseries transitioned to stocking fewer Brook Trout and more Rainbow Trout?

Starting in the early-2000's, the PFBC began to receive angler reports of consistently low opening day catches from some stocked-trout streams. The PFBC launched multiple studies over more than a decade on over 300 streams statewide and determined that trout were leaving and/or dying at a high rate in some streams prior to opening day. Results indicated that Brook Trout were most likely to leave the streams and/or die after stocking, while Rainbow Trout were more likely to survive and remain within the streams after stocking. A

recent stocked trout residency and survival study in North Carolina documented similar results as those in the PFBC's studies. Following these studies, the PFBC developed numerous stocking strategies to maximize stocked trout angling opportunities, which includes stocking more Rainbow Trout (and fewer Brook Trout) and stocking streams closer to opening day. Fisheries managers often use more Rainbow Trout during preseason stockings and a mixture of Rainbow Trout and Brown Trout during inseason stockings. This approach is used because Rainbow Trout are often easier to catch in colder water temperatures than Brown Trout, thus there is an added benefit of increased catchability during the early portion of trout season. Brown Trout tend to be more active as water temperatures increase in late-April, and thus, stocking a mixture of Brown Trout and Rainbow Trout maximizes inseason angling opportunities.

An additional benefit to stocking Rainbow Trout is that there are rarely concerns of them reproducing and establishing wild populations, especially in watersheds where they could compete with wild Brook Trout. Similarly, not stocking Brook Trout into watersheds where wild Brook Trout occur eliminates the possibility of introgression of hatchery genes into wild fish, which can reduce fitness and negatively impact wild Brook Trout populations over time. Furthermore, Rainbow Trout often perform better in a hatchery environment as they exhibit increased growth rates and are less susceptible to some pathogens and parasites than Brook Trout.

Traditionally, Brook Trout were stocked in waters with slightly acidic conditions (i.e., low pH), but as water quality has improved over time in some locations and we learned more about stocked trout behavior in general, stocking Brook Trout in these waters is not recommended as Rainbow Trout provide for a better stocked trout fishing experience. As such, the PFBC has transitioned to stocking fewer Brook Trout and more Rainbow Trout because Rainbow Trout exhibit better stream residency, there are fewer disease concerns, they grow to a larger size faster in hatcheries, angler catch rates are often better, and Rainbow Trout are more tolerant of warmer water temperatures thus extending the duration of the fishery on many waters. For these reasons, among others, Pennsylvania and other states have implemented stocking strategies that are heavily weighted toward stocking primarily Rainbow Trout. The PFBC will continue to manage some Stocked Trout Waters with Brook Trout but will transition to more Rainbow Trout and/or Brown Trout and implement innovative stocking and management strategies to maximize the quality of stocked trout angling in Pennsylvania.

### Where can I find more information?

Information on trout biology, fisheries management, interactive maps for wild and stocked trout fishing, and trout stocking schedules is available at:

<https://www.fishandboat.com/Fish/PennsylvaniaFishes/Trout/Pages/default.aspx>

***The Mission of the Pennsylvania Fish and Boat Commission is to protect, conserve and enhance the Commonwealth's aquatic resources and provide fishing and boating opportunities.***

