

## Brown Trout in Pennsylvania

The first brown trout (*Salmo trutta*) arrived in North America in 1883 with the shipment of 80,000 eggs that arrived at Cold Spring Harbor on Long Island New York, some of these eggs were then sent to Caledonia New York, the rest were sent to the US fish Commission. These eggs along with subsequent shipments of eggs became the brood stock from which many wild populations in North America have been established.

The first brown trout to come to Pennsylvania arrived in 1886 and were soon stocked in hundreds of streams that formerly had native populations of brook trout (*Salvelinus fontinalis*). Brown trout quickly filled the niche in streams where brook trout had been extirpated or where numbers were reduced by logging, farming, dams, or industrial discharges.

By 1900 nearly all of the primeval forests were logged at least once causing warming and siltation of trout streams many times all the way into the headwaters. Where brook trout weren't completely eliminated they have coexisted with brown trout for over 100 years. The resulting fisheries give Pennsylvania some of the most varied and most challenging trout fishing anywhere.

Generally brown trout prefer warmer water temperatures than brook trout, allowing browns to establish populations in a somewhat warmer environment. In particular brown trout do well in our limestone streams even though brook trout evolved there. Because brown trout are more aggressive in establishing territories and feeding lies they always grow larger and move brook trout to the less preferred lies when 2 species live in the same streams. For this reason brown trout for many anglers have become the preferred quarry.

Brown trout can be described as having red and black spots on a light background with some of the red spots having a blue halo. The back is always darker than the body ranging from olive brown, brown, or even black on silvery specimens. The lateral line area exhibits iridescence reminiscent of a rainbow trout when light hits the lateral line from certain angles. The underside of brown trout ranges from buttery yellow to white. The fins are yellow to orange with a dark edge on the ventral and anal fin is present on many individuals, especially dark specimens. The adipose fin varies from orange to red on wild fish, but is usually dark on hatchery fish. The caudal fin is square.

The difference of appearance between brown trout and brook trout is best described as, brown trout have dark spot on a light background, brook trout have light spots on a dark background, this is especially important now with the institution of the Brook Trout Enhancement Program by the Pennsylvania Fish and Boat Commission, this regulation allows the harvest of brown trout, but not brook trout.

In Pennsylvania we call stream bred brown trout wild and stream bred brook trout native. The difference is that brown trout are a species introduced from Europe and brook trout were present to all the drainages in Pennsylvania prior to European immigration. In Pennsylvania brook trout were commonly targeted by early colonists as a supplement to diets and for sporting challenge even in Philadelphia's Schuylkill River.

The Current status of brown trout in Pennsylvania has them as close to Philadelphia as Valley Forge National Park. Stocked brown trout may be found in Pennypack Creek and Wissahickon Creek in Philadelphia. Brown Trout are even found in the Schuylkill River in Philadelphia in angler surveys compiled by the Pennsylvania Fish and Boat Commission. Brown trout provide a challenging fishery for anglers all over Pennsylvania especially in streams that can no longer support brook trout because of either water quality issues or temperature issues.