salmonoid wrote:
Food, geology, stream substrate, sex, age of fish, where the fish holds, time of year, can all influence color.
I love the variety in fish from the same stream.

This. ^

Even a single trout can change its colors and shade dramatically during the course of a single season (the spots shape and position don't change, but the colors do, especially the background).
In my opinion, there is little point in trying to understand genetic strains when looking at the colors and spot patterns of trout in PA.

Enjoy their beauty, but don't overthink it.