

BIO-SECURE STEELHEAD SPAWN



photo-PFBC archives

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To maintain the world-class steelhead fishery that anglers enjoy annually on Lake Erie and its tributaries, the Pennsylvania Fish and Boat Commission (PFBC) conducts multiple spawning operations throughout the winter. While the tried-and-true method for growing the next generation of steelhead remains the same—mixing eggs and milt from female and male fish—the methods for achieving a safe and successful spawn are improving.

For the 2023-2024 season, PFBC biologists and fish culturists enhanced biosecurity during the spawn by initiating a new process that minimizes the risk of spreading pathogens, disease and Aquatic Invasive Species (AIS).

In previous years, a spawning session would begin with the netting of hundreds of adult steelhead from the Trout Run nursery water at Avonia Beach Park on the shore of Lake Erie. Upon collection, the fish were separated by sex, placed in aerated tanks and transported to Fairview State Fish Hatchery about a mile away, and held in concrete raceways. A week later, PFBC staff would process the fish by anesthetizing them, collecting eggs and milt, and returning the live fish to another raceway.

After recovery, the fish were loaded back onto trucks and returned to Lake Erie. Eggs collected during the spawn were transported to both the Tionesta State Fish Hatchery and Linesville State Fish Hatchery, where they were raised to juvenile size smolts until they were ready to be stocked.

While this process for raising approximately one million smolts annually was effective for several decades, changes were deemed necessary, primarily, to eliminate the transport of live fish from Lake Erie to hatcheries outside of the Lake Erie basin. To accomplish this goal, a temporary structure was placed at Avonia Beach, providing a place where fish collected from Trout Run could be immediately processed onsite using the same techniques that previously occurred in the hatcheries. Additionally, no staff or volunteers who had been in the stream to collect fish were admitted into the spawning structure, and all sorting of fish throughout the spawning process was also done onsite using temporary, aerated holding tanks and stocking trucks. Following recovery, the steelhead were returned directly to Lake Erie and its tributaries. Moving forward, all steelhead smolts will be raised exclusively at the Fairview State Fish Hatchery in an expanded raceway facility.

While these changes will have no impact on the average angler in search of a trophy steelhead, its result is a safer process that will further protect one of Pennsylvania's most unique recreational fishing resources for years to come. ☐