



## The History of Trout Hatcheries in Maryland

By Steve Minkkinen

Brook trout, *Salvelinus fontinalis*, are the only native salmonid species in Maryland. Brook trout were once abundant in many streams and rivers of the state. In *Forty Four Years of the Life of a Hunter* Meshach Browning spoke of catching large numbers of big brook trout in Deep Creek as fast as he could bait his hook, using the meat of a deer he harvested. Albert Powell, a former director of hatcheries in Maryland, wrote of catching 18" - 20" brook trout in tributaries of Deep Creek Lake in 1926.



The first fish hatcheries were built by The Commissioners of Fisheries, which was established by the general assembly in 1874. The main mission assigned to the commissioners was to assess the status of fisheries and to stock food fish to enhance fisheries. The first hatcheries were built for American shad production since this was the most important food fish in Maryland. The first salmonid hatchery was located at Druids Hill Park near Baltimore. This hatchery actually cultured Pacific and Atlantic salmon since they were a valuable food fish in the northeast and on the west coast. Salmon were stocked in mountain streams and in selected waters of Maryland's eastern shore beginning in 1875. Over the next several years, millions of salmon were stocked in Maryland in hope of introducing populations. After fifteen years of salmon stocking, the lack of adults returning to spawn caused the program to be canceled.

Trout hatcheries have been operating in Maryland for over 125 years. The first mention of trout propagation is in the 1877 Commissioners report. During the next 20 years, millions of brook trout were stocked in state waters. The Commission approved applications from citizens to stock hatchery produced fish in tributaries. Early on, trout were routinely transported in ten gallon milk cans. Hatchery staff would transport fry and fingerlings around the state in wagons, trains and eventually trucks. They would use dippers (ladles) to agitate the water and ice to keep the water cool. They were often met by groups of enthusiastic sportsmen waiting to receive their allotted numbers.



In 1884, a hatchery was built on Deep Creek in order to avoid the long and expensive trip to transport salmonids from Baltimore to Garrett County. In 1885, this hatchery stocked rainbow trout, *Oncorhynchus mykiss*, into the Youghiohony River. This created a recreational fishery and within 3 years, 16" - 22" long rainbow trout were being caught. Other early trout facilities in Garrett County included Lake Brown Hatchery and Meadow Mountain Station.

The Conservation Commission was established to replace the Commissioners of Fisheries in 1916. The Commission conducted an investigation to establish a new trout hatchery. They settled on a site in Lewistown in Frederick County. This hatchery was built in 1918 and cultured brook trout.

Another hatchery was built at Cherry Creek in 1922. This Garrett County location permitted brook trout propagation close to stocking locations. This avoided costly transportation and allowed stocking of fish at greater sizes to increase survival. This hatchery only operated for a short time due to adverse water temperatures.

In 1925, a trout rearing station was established on White Rock Run. This was built and operated by members of the Izaak Walton League. In 1928, the Commission took over operation of the facility until it was closed in 1946.

A privately owned hatchery was operated by the Department and the U.S. Bureau of Fisheries at Hunting Creek from 1929-1946.

Until 1925, no trout were reared to more than 3" due to transport limitations to stocking locations. Locating rearing facilities near stocking areas and the development of roads and motor vehicles eventually allowed larger trout to be reared.

Brown trout, *Salmo trutta*, were first stocked in Maryland in 1925. They were stocked in Severn Run and Cabin John creek.



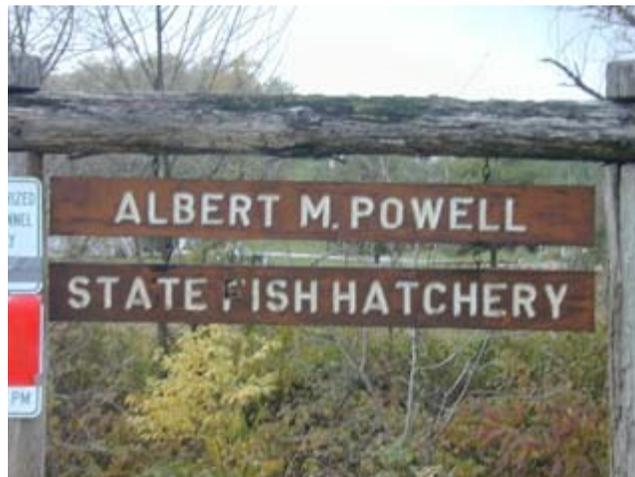
The Commission purchased twelve acres of land next to Bear Creek in 1928. A dam and several ponds were built in an old river channel alongside Bear Creek. Water was diverted by the dam and flowed through the culture ponds. The first crop of trout produced 49,000 brook trout and 24,000 rainbow trout which grew to 10" -14" in two growing seasons. Bear Creek Rearing Station continues operation today, growing up to 200,000 trout annually. Native hemlock and rhododendrons surrounding Bear Creeks

mountainous terrain make this one of the most

attractive trout facilities in Maryland.

By 1946, production from all the facilities constituted 60,000 - 70,000 10"-16" trout annually.

Beginning in 1946, Maryland's newest hatchery was built on Beaver Creek. Today this hatchery is named after Albert Powell who was Maryland's hatchery director for many years. Construction was completed in 1949. Several improvements have been made to this facility since construction. These improvements have increased rearing capacity and treat effluents to reduce the discharge of suspended solids from the hatchery into Beaver Creek.



By 1958, Maryland trout hatcheries were producing 117,000 trout at a cost of \$69,000 annually. Controversy about allocation of trout has always existed since every fisherman wants his favorite fishing hole stocked. We continue to work with stakeholders to allocate fish. Innovative management strategies are also not new. In 1938, Big Hunting Creek became the first "fly fishing only" area. During 1965, a catch and return area was established in the creek.

Several technological advances were made over the years. The first fish hauling tanks were placed on trucks in the 1930's. These could be oil tanks or specially made fish tanks. The hand net and bucket have never been replaced. Ice-cooled refrigerators and hand or gas powered meat grinders were used to make fish food out of meat. Meats used for food included beef liver, beef hearts, boiled eggs, viscera and trimmings from butchered animals and fish. Pelletized fish feeds, like those we use today, did not become common until the 1950's. By improving the fish quality and making sanitation easier to control bacteria and parasites, pelletized feed was the most valuable innovation. In addition, pelletized fish food greatly simplifies feeding and assures adequate nutrition levels. Electricity became common at the facilities in 1930's and 1940's.

Although there has been technological innovation in trout rearing since the 1800's, many aspects of rearing fish have not changed. Staff must maintain adequate supplies of high quality water in order to successfully grow trout. These conditions must be maintained without lapses throughout the entire culture cycle. This makes me think that the type of personnel we have working in these facilities has changed very little. They realize it is a 24 hours a day, 7 days a week operation. And although some of the equipment has changed, the sound of running water, the buckets, nets and routine feeding and cleaning are the same. Drawings of equipment used in the 1870's are still familiar to hatchery personnel today. Egg incubators appear unchanged as do many other routinely used items. This is because the fish have not changed. We still need to incubate fertilized eggs for several weeks until they hatch. Sac fry are reared until their yolk sacs are used up and they begin to feed. They are fed several times a day initially and eventually, once or twice a day as they grow. When fish reach the appropriate size, they are counted and transported to their stocking sites.

Currently we stock 500,000 trout annually in Maryland. These fish are produced for a wide range of objectives; from establishing populations, to put and take fishing, catch and release fishing, stocking into delayed harvest areas, catch and return areas, fly fishing only areas, artificial only areas, trophy areas and rodeo fishing to introduce children to fishing. The angler is the most important part of the program. He supplies the money for the operation through Maryland trout stamp sales and Federal excise taxes on fishing equipment. The angler trusts us to supply the products.

## References

- *Forty Four Years of the Life of a Hunter*, Meshach Browning. Winston Printing Co. 1859.
- *Historical Information of Maryland's Commission of Fisheries*. Albert Powell, Superintendent of hatcheries. 1967.
- *Commissioner of Fisheries annual reports, 1874-1915*.
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