

Fish Stocking in Ohio Waters

The ODNR, Division of Wildlife (DOW) has statutory authority for managing the fish populations in public waters of Ohio. Many Ohio fish populations are sustained by natural reproduction (for example, walleye and yellow perch in Lake Erie and largemouth bass, crappies, and bluegill in inland waters); however, in some instances, stocking is required to maintain the fisheries of certain species. Fish stocking has been an important component of the DOW's fisheries management approach since the inception of the agency as the Ohio Fish Commission in 1873. Stocking fish is a costly, though important, component of Ohio's fisheries management programs. To maximize the benefits of this management practice in a cost-effective manner requires in-depth consideration of numerous factors.

Anglers desire a variety of different experiences from Ohio's fisheries, and the overall goal among all of the fisheries managed by the DOW is to provide a variety of opportunities to meet angler expectations. Fisheries opportunities vary from completely harvest-oriented (i.e. rainbow trout and yellow perch), where anglers seek high catches of harvestable-size fish, to trophy fisheries (i.e. muskellunge), where anglers target, but generally do not harvest, large fish. A statewide management approach for all fisheries considers these expectations and seeks to provide a diversity of opportunities using a combination of harvest regulations and stocking approaches to satisfy the expectations of most anglers. District, Lake Erie, Research Station, and Fish Hatchery personnel all contribute to a tactical planning process to determine how many fish to raise and stock to meet program needs and angler desires with available resources and hatchery capacities.

Life stages

The DOW stocks fishes at six different life stages, each representing a differing investment of resources. Survival of stocked fishes generally increases with the size stocked. Fish stocked at smaller sizes are more vulnerable to predation and variations in environmental conditions than larger fish; however, smaller fish are less expensive to produce and can be stocked in greater numbers to offset the losses resulting from lower survival rates.

Management objectives, angler utilization, and fishery performance history ultimately determine the decisions to stock and which life stages are ultimately stocked. Stocking rates (number of fish stocked per surface acre of water) vary among life stages, depending on the expected survival rates and the management objective of the stocking. Generally, fry are stocked at the highest rates and yearlings and catchables are stocked at the lowest rates. The life stage(s) stocked for a species represents a tradeoff between the number that survive to sizes desired by anglers, production costs, and hatchery capacity. Some fishes are stocked at multiple life stages if this practice best meets management objectives. For example, hybrid striped bass, saugeye, walleye and yellow perch are all stocked as both fry and fingerlings because research and management have shown that the survival of stocked fry varies among the reservoirs stocked. Stocking fingerlings is necessary in reservoirs where fry stocking does not meet management objectives.

Life stage	Size	Age	Species
Fry	¼ - ½"	1 - 2 weeks	Hybrid Striped Bass, Saugeye, Walleye, Yellow Perch
Fingerling	1 - 2"	1 - 2 months	Bluegill, Hybrid Striped Bass, Largemouth Bass, Saugeye, Walleye, Yellow Perch
Advanced fingerling	6-10"	4 - 6 months	Blue Catfish, Channel Catfish, Muskellunge
Yearling	8-12"	11 - 18 months	Brown Trout, Channel Catfish, Steelhead
Catchable	10-12+"	2+ years	Bluegill*, Channel Catfish, Rainbow Trout

*Catchable Bluegill are stocked at 7-8"

Stocking Approaches

The DOW stocks fish using four approaches that vary in purpose, the life stages stocked, species stocked, and the timeline required for creating angling opportunities.

Put-and-Take stockings create fishing opportunities immediately to create opportunities in small waterbodies (i.e., ponds), often where fishing events directed at youth or families are being hosted. Catchable-sized rainbow trout, bluegill, and channel catfish are stocked to provide Put-and-Take opportunities.

Put-Grow-Take involves stocking fish at fry, fingerling, advanced fingerling, or yearling life stages which require two or more years of growth to reach harvestable sizes. Most DOW stocking programs are put-grow-take, and include walleye, saugeye, yellow perch, hybrid striped bass, steelhead trout, brown trout, channel catfish, blue catfish, and muskellunge.

Rehabilitation stockings are aimed at jump starting fisheries in waters that have been drained or lowered to facilitate dam and/or outlet repairs. When a waterbody is drained or lowered for dam/outlet repair, all, or a majority, of the fish may be displaced into the receiving waterway downstream. When repairs are complete, these locations receive one-time stockings to ensure that the fisheries recover quickly.

Restoration stockings are conducted to reintroduce or restore native populations to desired levels. Management objectives for these stockings can include improving biodiversity or building a sufficient self-sustaining population. The recent lake sturgeon stocking in the Maumee River is a good example of a restoration stocking. Lake sturgeon were almost completely extirpated from Lake Erie during the early 1900s, and the recent stocking efforts are intended to restore that population.

Fishes are stocked for a variety of reasons but providing sport fishing opportunities continues to be the primary purpose of most stocking programs. These programs have been essential to provide fisheries in waters where they would not exist, or exist at sustainable levels, due to habitat degradation, recruitment failure, or fishing pressure.

Species	Stocking Approach	Life stage	Stocking Rate (# / acre)	Goal
Bluegill	Rehabilitation	Fingerling	500	Re-establish a self-sustaining population
	Put-and-Take	Catchable	Variable	Harvest
Blue catfish	Put-Grow-Take	Advanced fingerling	20	Trophy
Brown trout	Put-Grow-Take	Yearling	500*	Harvest
Channel catfish	Put-and-Take	Catchable	Variable	Harvest
		Advanced fingerling	50	Harvest
		Yearling	12 - 25	Harvest
Hybrid striped bass	Put-Grow-Take	Fry	500	Harvest
		Fingerling	50**	Harvest
Lake sturgeon	Restoration	Advanced fingerling	***	Re-establish a self-sustaining population
Largemouth bass	Rehabilitation	Fingerling	100	Re-establish a self-sustaining population
Muskellunge	Put-Grow-Take	Advanced fingerling	1	Trophy
Rainbow trout	Put-and-Take	Catchable	Variable	Harvest
Saugeye	Put-Grow-Take	Fry	100 - 200	Harvest
		Fingerling	1,000	Harvest
Steelhead trout	Put-Grow-Take	Yearling	***	Harvest / Trophy
Walleye	Put-Grow-Take	Fry	100 - 200	Harvest
		Fingerling	1,000	Harvest
Yellow Perch	Put-Grow-Take	Fry	500	Harvest
		Fingerling	250	Harvest

*Brown trout are stocked in streams at a rate of 500 yearlings per mile.

**Hybrid striped bass are stocked at a rate of 5 fingerlings per acre in Great Miami, Muskingum, and Ohio river pools.

***Lake sturgeon and steelhead are stocked at variable rates in select Lake Erie tributaries.