



Pennsylvania Fish & Boat Commission
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Chain Pickerel (*Esox niger*) Management and Fishing in Pennsylvania

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2018 update

Goal: Maintain or restore targeted sport fisheries through harvest management and judicious stocking that recognize naturally produced Chain Pickerel, and enlist habitat management approaches that foster increased density of naturally produced and restoration stocking of Chain Pickerel.

Chain Pickerel occur in, and are native to, Pennsylvania's Atlantic slope rivers. Chain Pickerel are found in river and stream (lotic) habitats and lake and reservoir (lentic) habitats within the Delaware River, Susquehanna River, and Potomac River drainages. Self-sustaining populations occur throughout eastern Pennsylvania. Robust populations are found in the many natural and semi-natural lakes in northeastern Pennsylvania. Chain Pickerel are rarely found outside of their native range in Pennsylvania, although self-sustaining populations exist in several reservoirs within the Ohio River Basin.

Sport harvest limits and stocking represent the most widely applied techniques used by fisheries biologists in Pennsylvania to sustain and enhance sport fisheries. Stocking has been prescribed to maintain declining or low-density Chain Pickerel populations and to introduce them into man-made habitats (reservoirs) that are expected to sustain fisheries. All Chain Pickerel stocked in Pennsylvania are derived from wild-caught brood stock from lakes in northeastern Pennsylvania, listed in the [Brood Stock Lakes Program](#). Progeny are reared to fingerling size for stocking. In the years from 2013 to 2017, from 1 to 2 waters, or water sections, per year were stocked with Chain Pickerel. Fingerling stocking takes place to maintain or supplement only a few fisheries since most populations are sustained through natural reproduction. Annual [stocking summary](#) details are posted elsewhere on this web site. Our [Warmwater and Coolwater fishing map](#) provides a broad selection of waters where Chain Pickerel fishing opportunities can be found in Pennsylvania. As with many esocid species in this state, Chain Pickerel are not widely distributed and primarily occur in eastern Pennsylvania.

Anglers may be curious as to what size some species can attain in Pennsylvania waters. Pennsylvania's [current state record fish](#) provide perspective regarding maximum size attainable. Below, we illustrate the growth rate of Chain Pickerel in Pennsylvania, and note that it requires over 5 years for a Chain Pickerel to attain the inland legal size of 18 inches (Figure 1). [Inland harvest of Chain Pickerel is limited to 4 fish of at least 18 inches in length](#) (approximately 1.3 pounds) per day. For most waters harvest is permitted year-round. A catch and release season applies to those waters in the [Brood Stock Lakes Program](#) from April 1 through May 31 as noted above. Angler harvest and consumption of Chain Pickerel is prohibited at these times, since brood stock that are collected are anesthetized for handling and used in culture of young fish for stocking by fish culture personnel, with brood fish subsequently returned to these waters. The minimum size limit insures

adequate numbers of mature Chain Pickerel are available for natural spawning and natural production of young. Flooded riparian zones with aquatic vegetation characterize spawning and nursery habitats in lakes, rivers, and streams. Along with these features, within their native range, Chain Pickerel are often associated with clear or slightly bog-stained waters, that are not influenced by man-made erosion.

Apart from inland harvest regulation programs, which have been applied and evaluated to sustain high quality fishing, Pennsylvania Fish and Boat Commission biologists have also collaborated with biologist in neighboring states to develop harvest regulations that apply to border waters to sustain high quality fishing experiences. These waters include the Delaware River and tributaries, and Conowingo Reservoir on the lower Susquehanna River. [Border water regulations applying to these locations may differ from Inland harvest regulation and can be found elsewhere on this website.](#) Anglers should consult the current Summary of Fishing Laws and Regulations and abide by harvest rules applicable to boundary water locations or inland locations they fish.

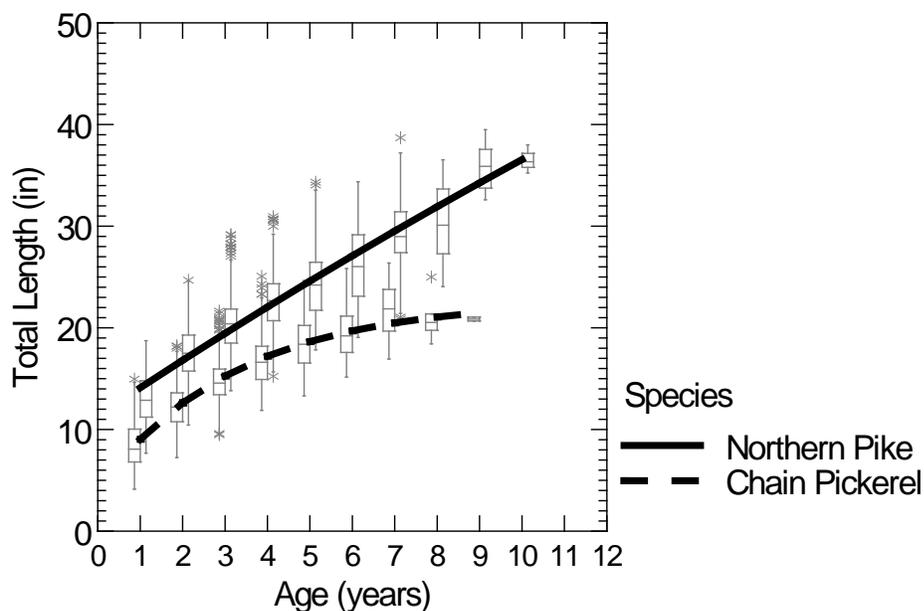


Figure 1. Average length at age of Chain Pickerel and Northern Pike (*Esox lucius*) collected by fisheries biologists in assessment gear in Pennsylvania (March-June)

[Biologists regularly sample fish populations](#) to measure their abundance and size structure. Fish habitat is also described by measuring water productivity, aquatic vegetation density, and other features. Following such evaluations, management plans are prescribed to enhance, or maintain, abundance and size structure of Chain Pickerel within resource limits. In association with these evaluations, growth of Chain Pickerel is examined by measuring length, weight, and taking a scale sample to determine age. We have tabulated average ages and weights for a variety of lengths of Chain Pickerel in Pennsylvania (Table 1). Anglers find these tables useful in approximating the weight and age of their catch. Anglers should note that values for individual fish may vary. Fish length at age depends on a variety of factors including habitat, gender, genetics, forage abundance, and other conditions. Growth, production of young, and angler harvest of Chain Pickerel represent some important data elements that are used by biologists to develop management plans that produce desirable fishing opportunities.

Table 1. Average weight and average age of Chain Pickerel, at a given length, collected by fisheries biologists in Pennsylvania (March - June)								
<i>Inches</i>	<i>Pounds</i>	<i>Years</i>	<i>Inches</i>	<i>Pounds</i>	<i>Years</i>	<i>Inches</i>	<i>Pounds</i>	<i>Years</i>
4	0.1	0.7	13.5	0.5	3.5	23	2.8	9.8
4.5	0.1	0.8	14	0.6	3.7	23.5	3.0	10.5
5	0.1	1.0	14.5	0.6	3.9	24	3.2	11.4
5.5	0.1	1.1	15	0.7	4.1	24.5	3.4	12.4
6	0.1	1.2	15.5	0.8	4.3	25	3.6	13.6
6.5	0.1	1.3	16	0.9	4.5	25.5	3.9	15.3
7	0.1	1.4	16.5	0.9	4.8	26	4.1	17.7
7.5	0.1	1.6	17	1.0	5.0	26.5	4.4	> 17.7
8	0.1	1.7	17.5	1.1	5.3	27	4.7	> 17.7
8.5	0.1	1.8	18	1.3	5.6	27.5	5.0	> 17.7
9	0.1	2.0	18.5	1.4	5.9	28	5.3	> 17.7
9.5	0.2	2.1	19	1.5	6.2	28.5	5.6	> 17.7
10	0.2	2.3	19.5	1.6	6.5	29	5.9	> 17.7
10.5	0.2	2.4	20	1.8	6.9	29.5	6.2	> 17.7
11	0.3	2.6	20.5	1.9	7.3	30	6.6	> 17.7
11.5	0.3	2.8	21	2.1	7.7	30.5	7.0	> 17.7
12	0.3	2.9	21.5	2.2	8.1	31	7.3	> 17.7
12.5	0.4	3.1	22	2.4	8.6	31.5	7.7	> 17.7
13	0.4	3.3	22.5	2.6	9.2	32	8.1	> 17.7

Tabulating catch and harvest from a sample of anglers to estimate total catch and harvest from a waterway is essential in developing management plans. Information such as this, derived from creel surveys, frequently yields information not only essential to biologists, but also of interest to anglers, since seasonal peaks in catch rate occur for most species. Pennsylvania surveys show that Chain Pickerel can be caught most any time of year, generally though, highest catch per hour occurs in winter on medium size reservoirs (Figure 2). Although our Biological creel sampling on large reservoirs does not cover all seasons, springtime yields good catch rates on large reservoirs over the period examined (Figure 3). On rivers, catch rates in spring are also high (Figure 4). Anglers who identify fishing destinations from [maps on this site](#) along with information that identifies the times of year when angler catch rate of Chain Pickerel is high are often rewarded with a successful fishing outing. Anglers need only select an effective bait or lure to complete their individual fishing plan. Anglers typically catch Chain Pickerel with live minnows, spinners, spoons, and minnow shaped artificial baits. Catching a Chain Pickerel through the ice on a winter day is an experience many Pennsylvania anglers wait for all year.

Additional information that can be helpful to answer some questions that an angler may have can be found on the [Fishing FAQs](#) page located elsewhere on this website.

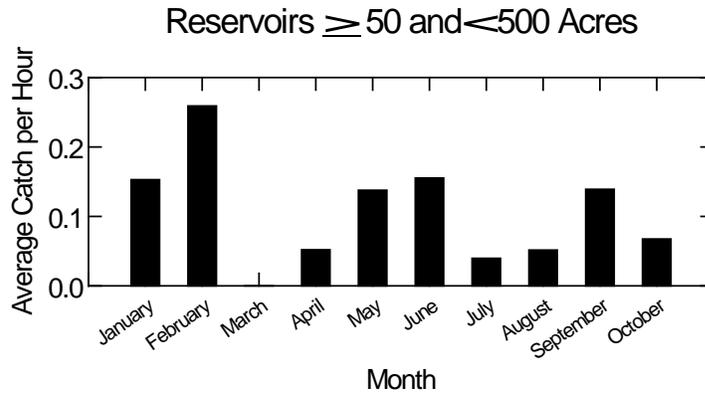


Figure 2. Average catch per angler hour, by month, of Chain Pickerel from medium size Pennsylvania reservoirs

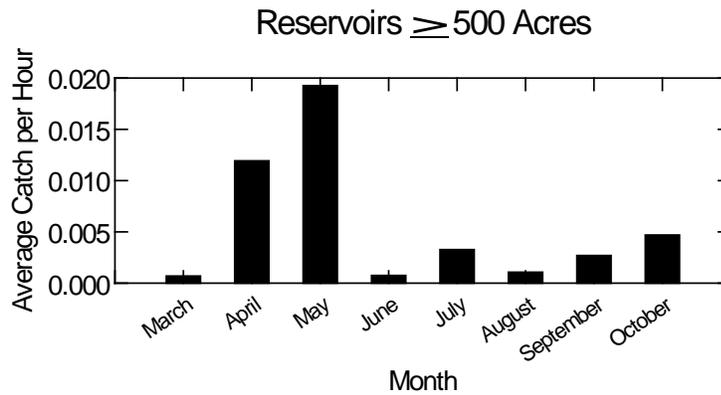


Figure 3. Average catch per angler hour, by month, of Chain Pickerel from large size Pennsylvania reservoirs

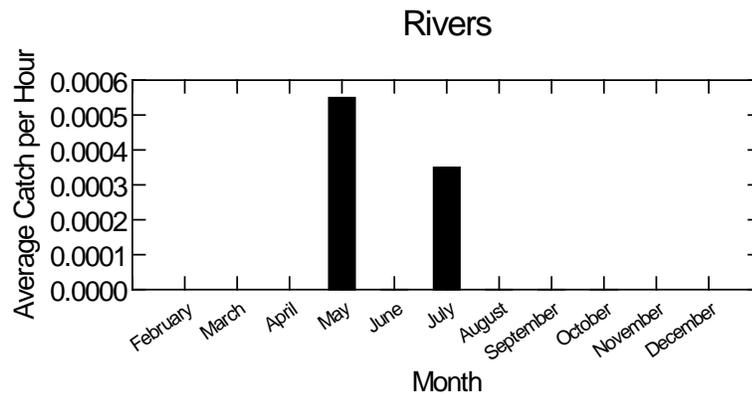


Figure 4. Average catch per angler hour, by month, of Chain Pickerel from Pennsylvania rivers