

Northern Pike Management and Fishing in Pennsylvania

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Goal: Maintain or create enhanced sport fisheries through harvest management and judicious stocking that recognize naturally produced northern pike and enlist habitat management approaches that foster increased density of naturally produced and maintenance stocked northern pike.

Northern pike populations occur at limited locations across Pennsylvania. Northern pike were indigenous to river and stream (lotic) habitats and lake (lentic) habitats in the Ohio River and Lake Erie Drainage. The Ohio River drainage includes the Ohio River, Allegheny River and Monongahela River drainage. Natural reproduction sustains robust populations in Presque Isle Bay and several natural lakes and man-made reservoirs in western Pennsylvania. Pennsylvania Fish and Boat Commission stocking programs have expanded the range of northern pike, east, to locations throughout Pennsylvania, in several eastern lakes and reservoirs naturalized populations have been established. Few northern pike populations in Pennsylvania are maintained through Pennsylvania Fish and Boat Commission (PFBC) stocking programs.

Sport harvest limits and stocking represent the most widely applied techniques used by Fishery Biologists in Pennsylvania to sustain and enhance sport fisheries. Stocking was initiated to counter declining northern pike populations and to introduce them into man-made habitats (reservoirs) that were expected to sustain fisheries. Fingerlings have been maintenance-stocked to sustain fishing in several suitable waters where natural reproduction is lacking. All northern pike stocked in Pennsylvania are derived from wild-caught broodfish from lakes in northwestern Pennsylvania and reared to fingerling size (Table 1).

Table 1.	Northern pike stocking by the Pennsylvania Fish and Boat Commission.								
Year	Fingerling	Fry	Year	Fingerling	Fry				
1974	6,630	1,303,100	1991	1,600	0				
1975	9,000	76,000	1992	0	0				
1976	31,900	0	1993	10,358	0				

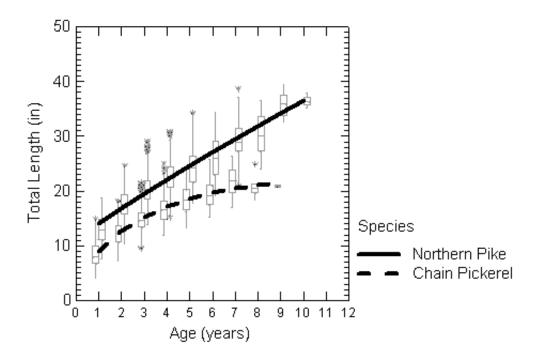
1977	25,350	0	1994	3,886	0
1978	8,900	258,000	1995	11,200	0
1979	16,135	3,000	1996	2,328	0
1980	11,200	0	1997	1,400	0
1981	16,405	0	1998	2,300	0
1982	16,537	0	1999	4,520	0
1983	13,260	0	2000	4,590	0
1984	38,250	0	2001	5,620	0
1985	5,177	0	2002	6,618	0
1986	21,316	0	2003	4,520	0
1987	7,900	0	2004	6,620	0
1988	19,100	0	2005	6,530	0
1989	5,500	0	2006	6,530	0
1990	3,650	0			·

Over the course of history in Pennsylvania many man-made reservoirs have been created, these "man-made" habitats sometimes do not provide attractive fisheries when colonized by indigenous fishes that occur in streams and rivers that drain into the reservoir. The Pennsylvania Fish and Boat Commission, examines and evaluates fish populations in man-made reservoirs as well as natural waters throughout Pennsylvania. Information derived from those assessments guide biologists relative to the suitability for northern pike stocking. Since northern pike are stocked as juveniles, appropriate juvenile habitat is necessary as well as availability of appropriately sized forage fish, in addition, the presence and density of other predators are considered as well as the needs and requirements of adult northern pike. In conjunction with creating fishing opportunities for northern pike, fishery managers insure that stocking takes place into a niche not filled such that no adverse impacts occur to desirable indigenous fish populations.

Inland harvest of northern pike is limited to 2 fish of at least 24 inches (approximately 3.5 pounds). It requires approximately 5 years for a northern pike to attain legal size (Fig. 1). In addition, a season closure extends from mid-March through the first Saturday in May, which prevents harvest during the spawning period. The minimum size limit insures adequate numbers of mature pike are available for spawning. Flooded riparian zones and marshes characterize spawning and nursery habitats essential for natural reproduction, such habitats are limited in Pennsylvania and this reflects the limited distribution of naturally spawned northern pike. Interest in northern pike and northern pike management has become increasingly popular on many Pennsylvania waterways where they occur naturally or are stocked.

Figure 1. Average length of northern pike and chain pickerel collected by Fisheries

Biologists in assessment gear in Pennsylvania (March - June).



Casting or trolling a variety of spoons, spinners, stick baits, or crank baits are used to entice northern pike. Casting lures or fly gear with appropriate strength leaders (steel leader) can yield northerns. In winter large live baits can be effective in catching large northerns through the ice. Although northern pike are usually willing to take a bait, summer fishing tends to be slow. Spring and fall fishing tends to yield highest catch rates for northern pike in large size reservoirs (Fig. 3), and rivers (Fig. 4). Spring fishing yields the highest catch rates in medium size reservoirs and lakes (Fig. 2). The very highest catch rates occur on large lakes or reservoirs in late winter or soon after ice out (Fig. 3). Once an angler catches a northern pike, they are interested the fishes weight and age. Data collected by Fishery Biologists and summarized in Table 2 indicates average values for each length. Anglers should note that values for individual fish will vary.

Figure 2. Average catch per angler hour of northern pike from medium size Pennsylvania reservoirs.

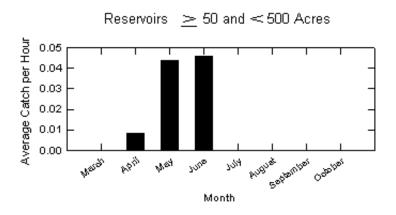


Figure 3. Average catch per angler hour of northern pike from large size Pennsylvania reservoirs.

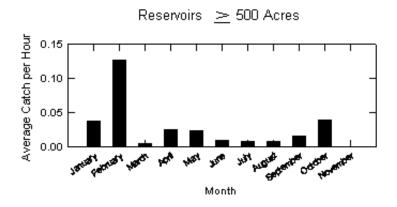


Figure 4. Average catch per angler hour of northern pike from Pennsylvania rivers.

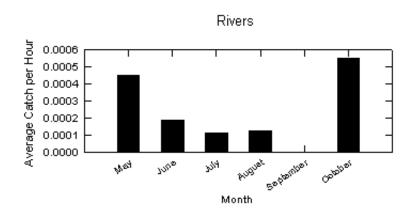


Table 2. Average weight and average age of northern pike at a given length (March - June).											
Inches	Pounds	Years	Inches	Pounds	Years	Inches	Pounds	Years	Inches	Pounds	Years
4	0.1	< 0.2	15.5	0.7	1.5	27	4.5	6.0	38.5	14.2	10.9
4.5	0.1	< 0.2	16	0.8	1.7	27.5	4.8	6.2	39	14.8	11.1
5	0.1	< 0.2	16.5	0.9	1.9	28	5.1	6.4	39.5	15.4	11.4
5.5	0.1	< 0.2	17	1.0	2.1	28.5	5.4	6.6	40	16.1	11.6
6	0.1	< 0.2	17.5	1.1	2.3	29	5.7	6.8	40.5	16.7	11.8
6.5	0.1	< 0.2	18	1.2	2.5	29.5	6.0	7.1	41	17.4	12.0
7	0.1	< 0.2	18.5	1.3	2.7	30	6.3	7.3	41.5	18.1	12.3
7.5	0.1	< 0.2	19	1.4	2.8	30.5	6.7	7.5	42	18.8	12.5
8	0.1	< 0.2	19.5	1.6	3.0	31	7.0	7.7	42.5	19.5	12.7
8.5	0.1	< 0.2	20	1.7	3.2	31.5	7.4	7.9	43	20.3	12.9
9	0.1	< 0.2	20.5	1.8	3.4	32	7.8	8.1	43.5	21.1	13.2
9.5	0.2	< 0.2	21	2.0	3.6	32.5	8.2	8.3	44	21.9	13.4
10	0.2	< 0.2	21.5	2.2	3.8	33	8.6	8.5	44.5	22.7	13.6
10.5	0.2	< 0.2	22	2.3	4.0	33.5	9.0	8.7	45	23.5	13.9
11	0.2	< 0.2	22.5	2.5	4.2	34	9.5	9.0	45.5	24.4	14.1
11.5	0.3	< 0.2	23	2.7	4.4	34.5	9.9	9.2	46	25.2	14.3
12	0.3	0.2	23.5	2.9	4.6	35	10.4	9.4	46.5	26.1	14.6

12.5	0.4	0.4	24	3.1	4.8	35.5	10.9	9.6	47	27.1	14.8
13	0.4	0.6	24.5	3.3	5.0	36	11.4	9.8	47.5	28.0	15.0
13.5	0.5	0.8	25	3.5	5.2	36.5	11.9	10.0	48	29.0	15.3
14	0.5	0.9	25.5	3.7	5.4	37	12.5	10.3	48.5	30.0	15.5
14.5	0.6	1.1	26	4.0	5.6	37.5	13.0	10.5	49	31.0	15.7
15	0.7	1.3	26.5	4.2	5.8	38	13.6	10.7			