

Pike Lake Chain of Lakes Fishery Surveys – 2018

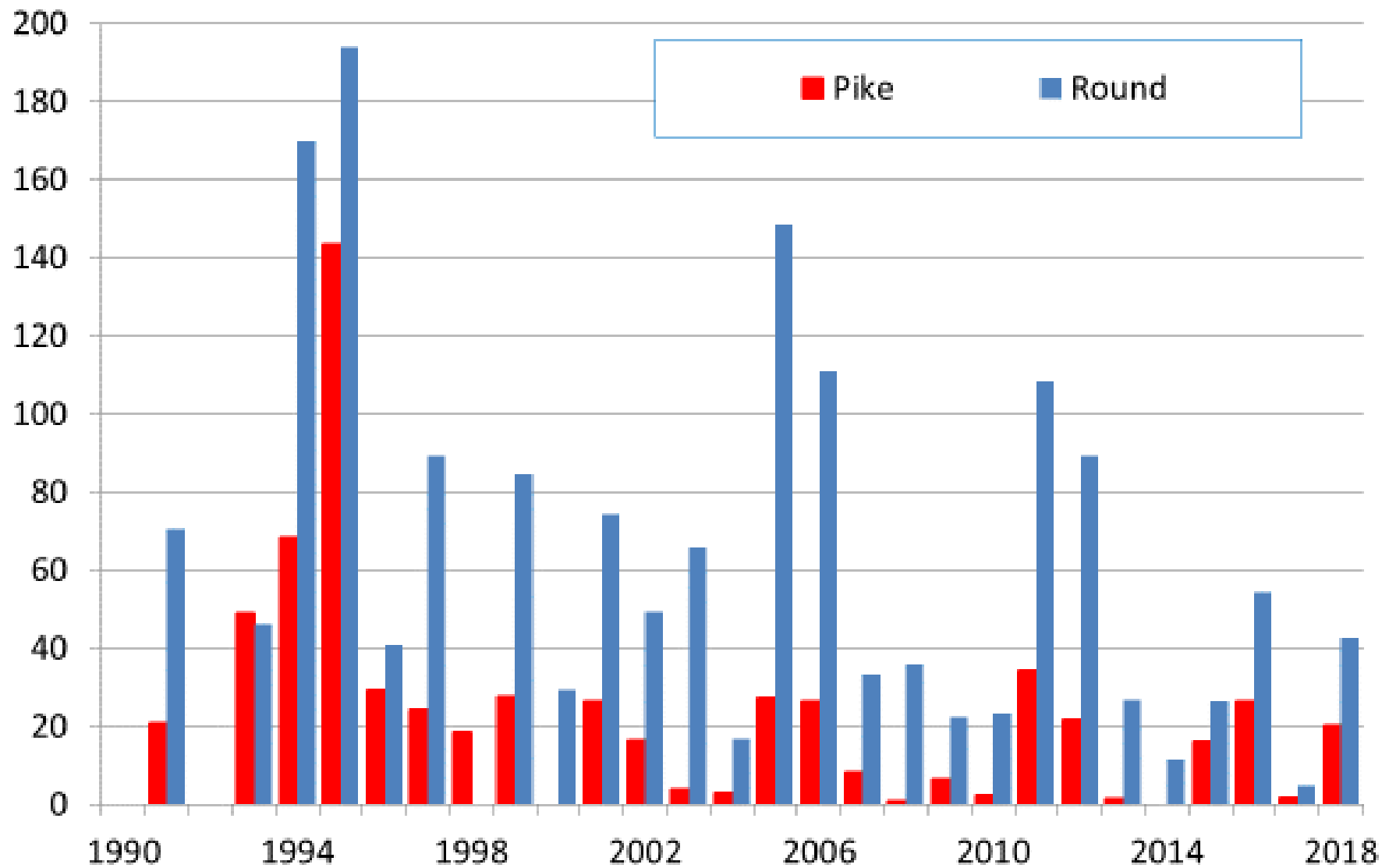
WDNR and U.S. Forest Service Fishery Teams from Madison, Spooner, and Park Falls collected walleye by fyke netting and nighttime electrofishing immediately after the ice thawed in early May 2018 to estimate adult population density by the mark-recapture method. Two creel clerks counted and interviewed anglers to estimate fishing pressure, catch, and harvest in the 2018 – 2019 fishing season. In the table below, we compare results for walleye from surveys by identical methods in 2005 and 2018, and with the goals that stakeholders helped us define for the population. Estimates of effort, catch, and harvest are for the open-water period in both years, though the present-day creel survey will continue through March 3, 2019.

Lake	Acres	Walleye Density (adults/acre)		Walleye Density Goal (adults/acre)	Percent walleye ≥ 15"		Percent walleye ≥ 15" Goal	Total Fishing Effort (hours/acre)		Fishing effort for walleye (hours/acre)		Walleye catch/acre		Walleye harvest/acre	
		2018	2005		2018	2005		2018	2005	2018	2005	2018	2005	2018	2005
Amik	224	0.9	0.9	1 - 3	91	64	20 - 40	46.7	38.2	4.1	4.8	1.2	1.0	0.51	0.35
Pike	806	0.9	2.9	2 - 4	67	31	20 - 40	22.9	19.6	4.9	5.2	1.7	0.93	0.72	0.07
Round	726	2.1	4.9	4 - 6	27	9	20 - 40	18.9	18.1	6.5	6.7	3.3	3.2	0.84	0.85
Turner	149	1.0	1.7	2 - 4	92	77	20 - 40	44.2	46.1	4.5	10.2	0.39	2.0	0.03	0.54

To assess the first-summer survival of walleye hatched in the Pike Lake Chain in spring 2018 and their contribution to the adult population, WDNR and U.S. Forest Service Fishery Teams from Park Falls completed electrofishing surveys along the entire shoreline of the four lakes in fall 2018. Our electrofishing capture rate of age-0 walleyes, expressed as fingerlings per mile, is our standard measure of walleye recruitment that can be compared among waters and years. The walleye recruitment history for the Pike Lake Chain is presented in the following charts. Annual fall electrofishing surveys in Pike and Round lakes serve as “controls” to track year-to-year fluctuations in natural walleye production as ongoing research tries to find out why walleye recruitment has declined so much in so many northern lakes.

Walleye Recruitment

(fingerlings/mile of electrofishing)



Walleye Recruitment (fingerlings/mile of electrofishing)

