

Lake Owen Update as of Spring 2020

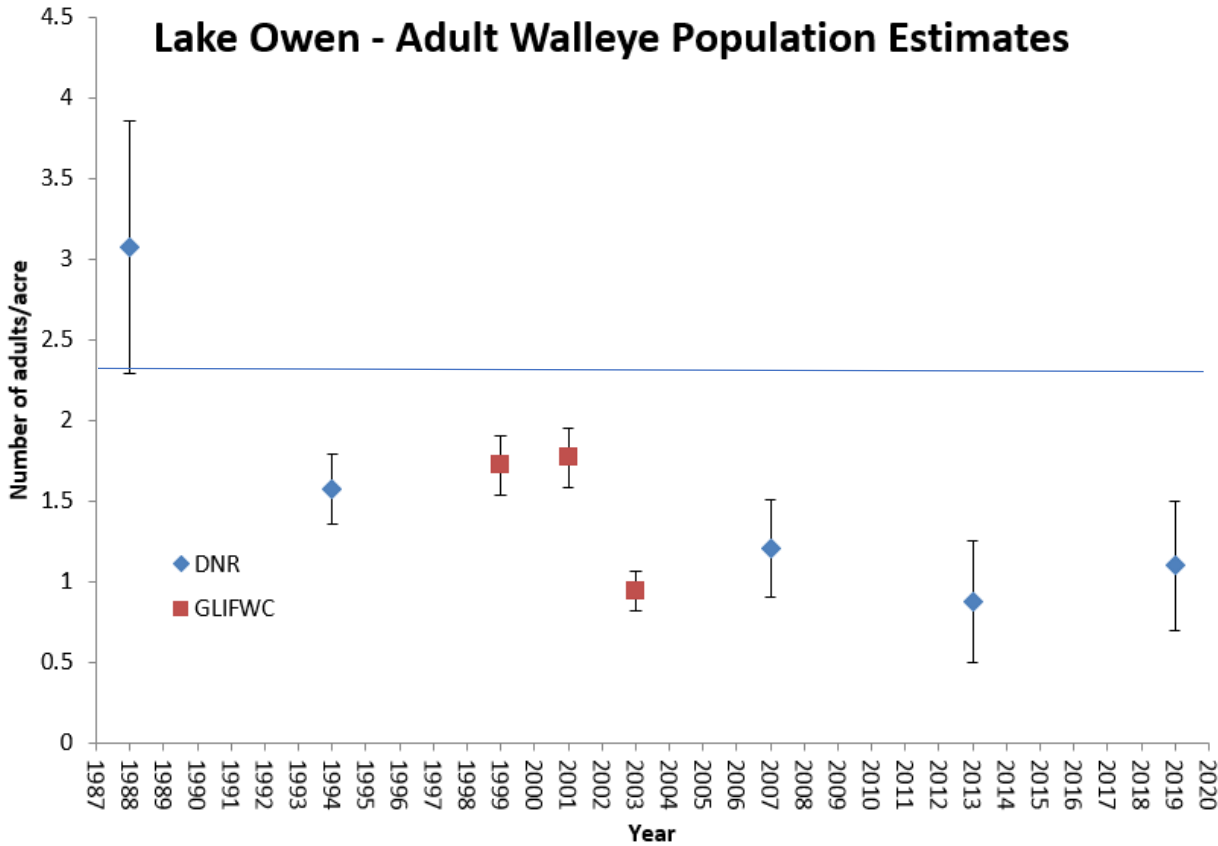


Figure 1. Lake Owen adult population estimates through time.

Year	Lake Name	Species	Age Class	Number Stocked	Source	Average Length
2011	LAKE OWEN	WALLEYE	LARGE FINGERLING	6,615	DNR	6.2
2011	LAKE OWEN	WALLEYE	LARGE FINGERLING	4,319	NON-DNR	6
2012	LAKE OWEN	WALLEYE	LARGE FINGERLING	6,614	DNR	7.7
2013	LAKE OWEN	WALLEYE	LARGE FINGERLING	3,307	DNR	6.5
2013	LAKE OWEN	WALLEYE	LARGE FINGERLING	4,960	NON-DNR	6
2014	LAKE OWEN	WALLEYE	LARGE FINGERLING	12,943	DNR	6.3
2016	LAKE OWEN	WALLEYE	LARGE FINGERLING	12,532	DNR	7.4
2018	LAKE OWEN	WALLEYE	LARGE FINGERLING	12,495	DNR	6.3
*2020	LAKE OWEN	WALLEYE	LARGE FINGERLING	*12499	DNR	*TBD
			Total	76,284		

Table 1. Recent Owen Walleye Stocking History. Despite COVID-19 disruptions to most Department fieldwork, hatcheries were able to get necessary gametes to fulfill 2020 stocking quotas. I haven't heard about the harvest of small fingerlings (which would normally serve as our update on how well production has gone), and you should never count your chickens before they hatch..., but it sounds like hatchery production should be on schedule. Thus, at this point, we are slated to get the full quota for fall 2020.

Lake Owen Historic Bass Abundances

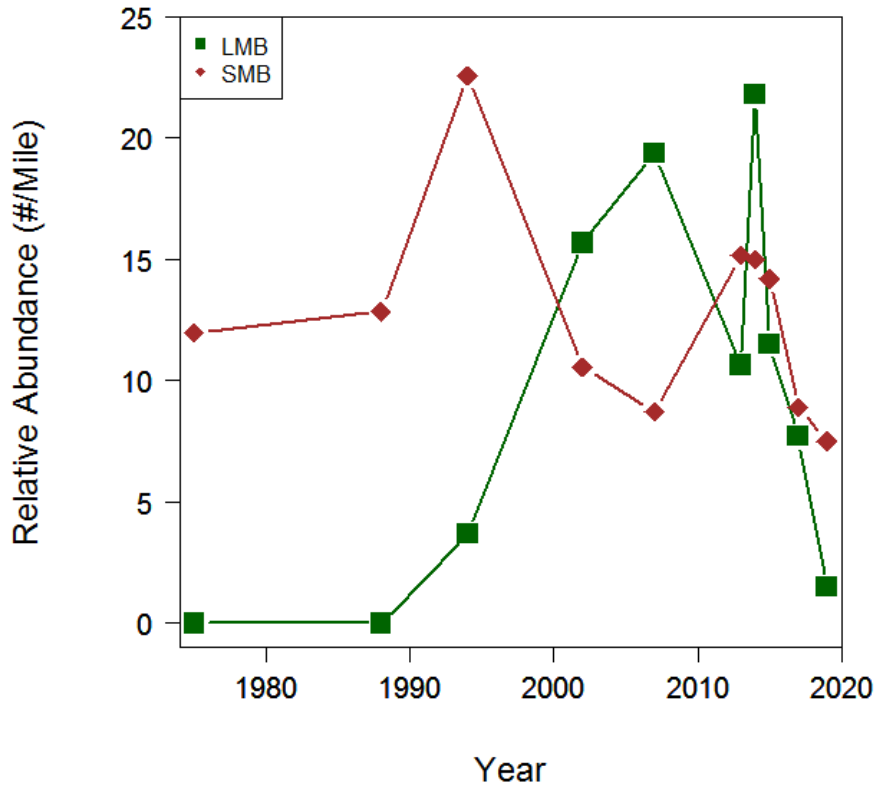


Figure 2. Bass relative abundances from late spring electrofishing surveys. *Note that 2019 bass electrofishing survey was only 4.5 miles, where previous surveys have typically been 10 miles. LMB relative abundance has decreased substantially in last 5-10 years, but SMB have been consistent.

Tribal Harvest on Lake Owen

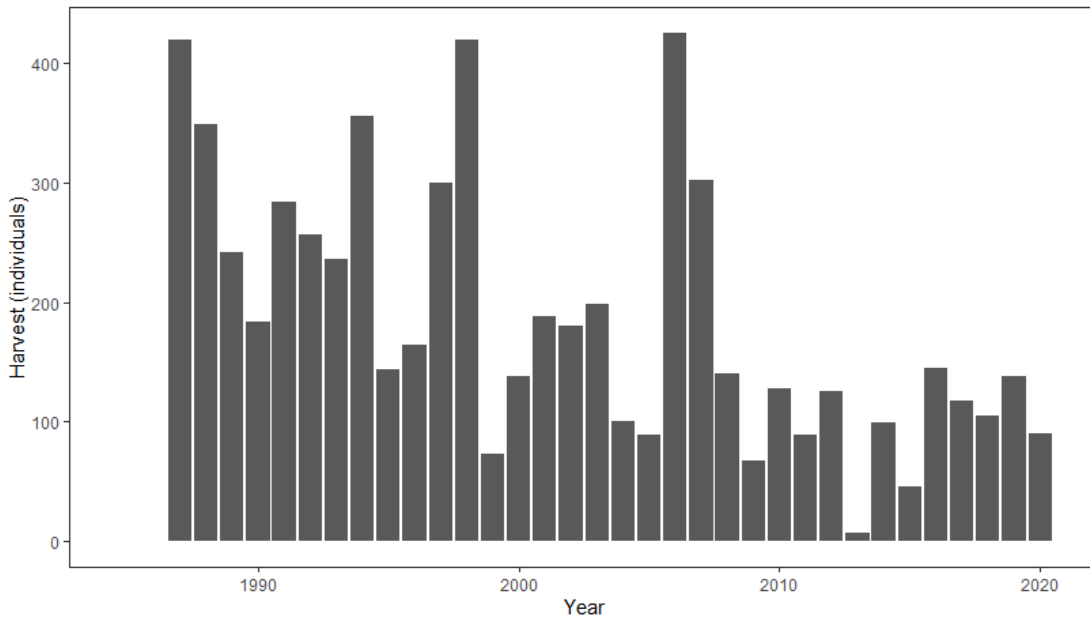


Figure 3. Tribal harvest through time on Lake Owen.

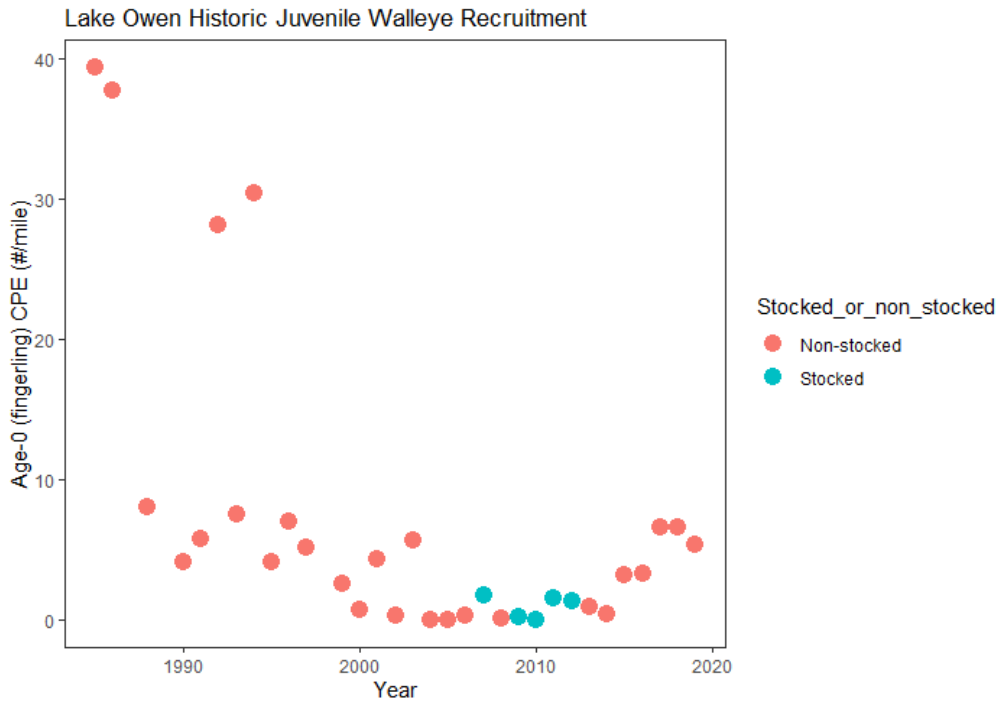


Figure 4. Historic juvenile (age-0) recruitment rates on Owen. Recruitment documented in 2019 (and last couple of years for that matter) has been present and consistent (albeit low), but on par with recruitment rates in the late 1990's and early 2000's.

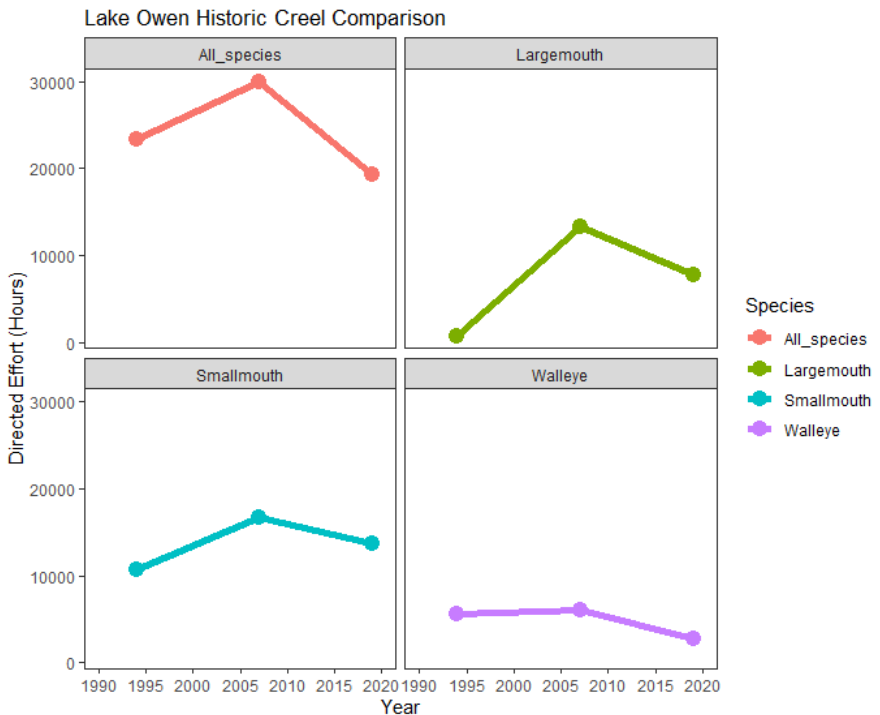


Figure 5. Summary of effort for bass, walleye, and all species for all creel surveys on record for Owen. These are not all creel statistics (obviously), but there are a few interesting tid-bits in here (rise in LMB effort, declines in WAE effort, consistent SMB effort, and a marked decline in overall effort; 10,000 hrs or 30% over 10 years).

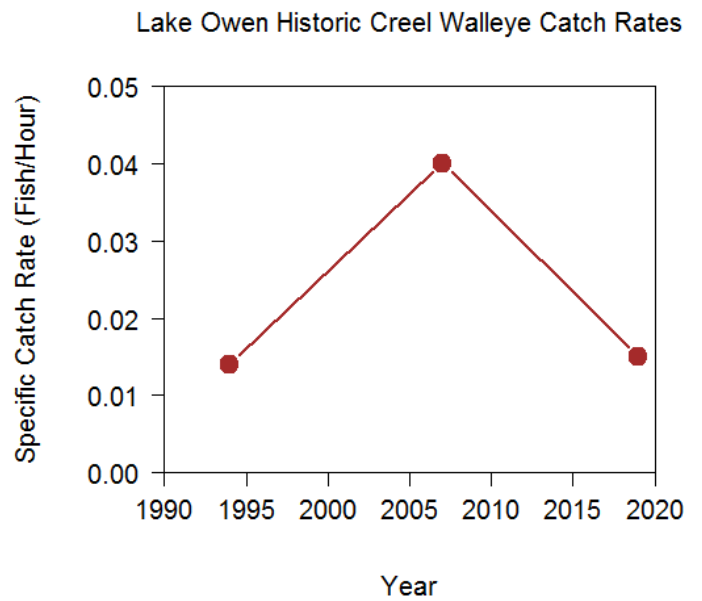
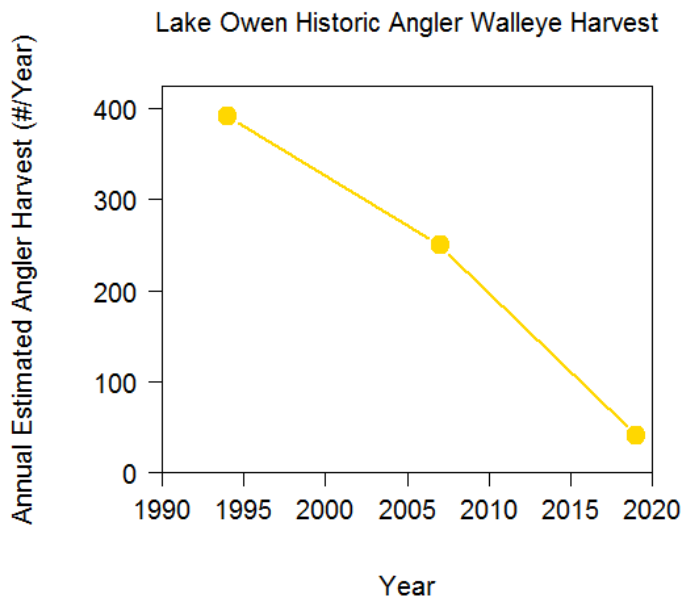


Figure 6. Walleye angler catch rate and harvest measured in 2019 and historic creel surveys. Note that walleye harvest continues to decline through time but catch rates do not follow the same trends (i.e. catch rate in 2019 were higher than in 1994).

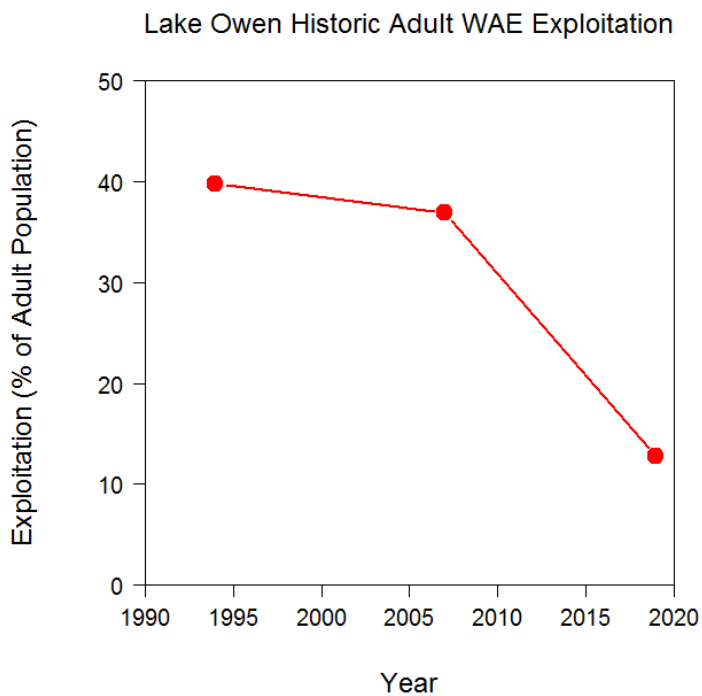


Figure 7. Adult walleye population exploitation through time. *Note most northern WI fisheries boast a maximum sustainable exploitation level somewhere between 20-30% (depending on productivity and recruitment rates). Estimated exploitation from 2019 land at a more-sustainable rate than calculated historic levels. The crux of this puzzle is to tune recruitment rates to offset exploitation,