

Colchester Walleye Derby, 2011

The Ontario Ministry of Natural Resources attended the Colchester Walleye Derby on June 11, 2011. MNR staff conducted 61 boat interviews in order to estimate walleye harvest and catch rates. MNR examined walleye for tags and recorded measurements to describe the size composition of the harvest.

In 2011, none of the 326 walleye that were measured contained PIT (Passive Integrated Transponder) tags (Table 1). These tags were applied to walleye by Ontario and U.S. Lake Erie fisheries management agencies from 2005 – 2007 and to a lesser extent in 2008 and 2010 to evaluate fishery exploitation and describe walleye population characteristics. From 2008 to 2011 derbies, only a single PIT tag was detected (in 2008). One female walleye examined this year (2011) contained an acoustic transmitter that was applied to the fish in the Maumee River, Ohio on March 30, 2011 (OHIO DNR). Information about this study is available online: www.glfsc.org/telemetry/walleye

Colchester walleye derby fishery statistics from 2008 to 2011 are presented in Table 2. Walleye catch per angler hour ranged from 0 to 1.7 in 2011 (Figure 1). The mean number of walleye caught per angler hour in 2011 (0.36) was similar to 2010 (0.39) but down from 2009 (0.53) and 2008 (0.69). Catch rate trends expressed as walleye caught per rod hour are similar, but with lower values as anglers may fish with 2 rods (Table 2). Average catch per boat in 2011 was 7.26 walleye. Expanding the observed catch from 61 interviews by the number of participants in the derby (450), the estimated total catch at the 2011 derby was 1,126 walleye. After deducting released fish, estimated harvest was 1,014 walleye or approximately 4,811 pounds using an assumed relationship between length and weight. Derby catch and harvest in 2011, while down slightly from 2010, was substantially below 2008 and 2009 levels (Table 3). The length composition of landed walleye from 2008 to 2011 reflects declining numbers of walleye ages 5 and older since 2008, offset to some degree by recruitment from the 2007 year class (Figure 2).

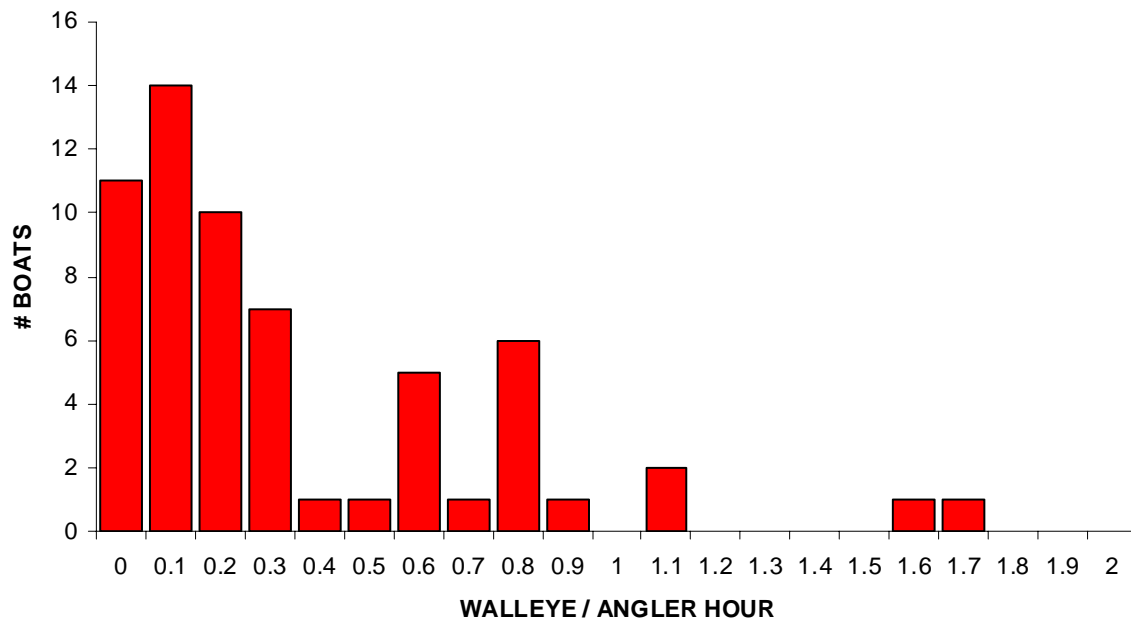


FIGURE 1. Histogram of walleye catch per angler hour. Mean = 0.36 walleye / angler hour. Estimated total harvest = 1014 walleye or 4811 pounds. June 11, 2011.

TABLE 1. Number of walleye scanned, PIT tag and acoustic tag recaptures 2008 - 2011.

YEAR	SCANNED INDIVIDUALLY	SCANNED IN GROUPS	SCANNED TOTAL	# PIT TAG RECAPS	ACOUSTIC TRANSMITTERS
2008	669	38	707	1	N/A
2009	486	0	486	0	N/A
2010	300	0	300	0	N/A
2011	326	0	326	0	1

TABLE 2. Walleye harvest, catch and release (in numbers of walleye) based on interviews 2008 - 2011.

YEAR	# BOATS INTERVIEWED (SAMPLES)	ANGLERS	RODS	ANGLERS / BOAT	RODS / BOAT	RODS / ANGLER	ANGLER HOURS	ROD HOURS	WALLEYE HARVEST	WALLEYE RELEASED	TOTAL CATCH
2008	76	226	354	2.97	4.66	1.57	1,582	2,523	719	377	1096
2009	66	183	281	2.77	4.26	1.54	1,292	2,012	548	142	690
2010	59	176	295	2.98	5.00	1.68	1,144	1,924	399	47	446
2011	61	177	303	2.90	4.97	1.71	1,238	2,111	399	44	443

YEAR	HARVEST / ANGLER	CATCH / ANGLER	HARVEST / ANGLER HOUR	CATCH / ANGLER HOUR	RELEASED / ANGLER HOUR	HARVEST / ROD HOUR	CATCH / ROD HOUR	RELEASED / ROD HOUR	HARVEST / BOAT	CATCH / BOAT	RELEASED / BOAT
2008	3.18	4.85	0.45	0.69	0.24	0.28	0.43	0.15	9.46	14.42	4.96
2009	2.99	3.77	0.42	0.53	0.11	0.27	0.34	0.07	8.30	10.45	2.15
2010	2.27	2.53	0.35	0.39	0.04	0.21	0.23	0.02	6.76	7.56	0.80
2011	2.25	2.50	0.32	0.36	0.04	0.19	0.21	0.02	6.54	7.26	0.72

TABLE 3. Estimated total walleye harvest (numbers, pounds) and total catch (numbers), expanded based on tournament participation 2008 - 2011.

YEAR	DERBY PARTICIPANTS	TOTAL HARVEST (WALLEYE)	TOTAL HARVEST POUNDS	TOTAL CATCH (WALLEYE)
2008	558	1,775	7,064	2,706
2009	540	1,617	6,755	2,036
2010	500	1,134	5,193	1,267
2011	450	1,014	4,811	1,126

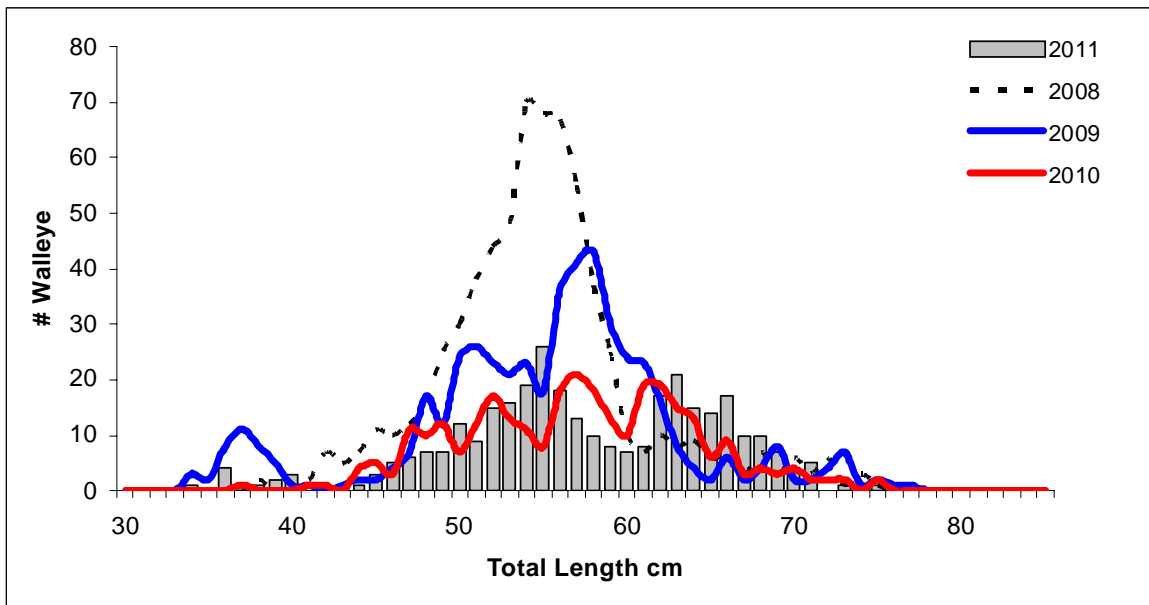


FIGURE 2. Total length frequency distributions of walleye caught in the Colchester Derby 2008 - 2011.