

Colchester Walleye Derby, 2015

The Ontario Ministry of Natural Resources and Forestry attended the Colchester Walleye Derby on June 13, 2015. MNRF staff engaged anglers at the information tent while conducting 71 interviews dockside in order to estimate Walleye harvest and catch rates. MNRF examined Walleye for tags and recorded total length measurements to describe the size composition of the harvest at the derby.

In 2015, none of the 255 Walleye that were scanned 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



OMNRF Lake Erie Management Unit staff from left to right: Stephen Marklevitz, Brandon Wood, Sean Yardley.

2008 to 2015 Colchester Walleye derbies, only a single PIT tag was detected (in 2008). No acoustic transmitters were found in Walleye examined in 2015. Information about the Lake Erie Walleye Telemetry Study is available online: <http://data.glos.us/glatos> Colchester Walleye Derby fishery statistics from 2008 to 2015 are presented in Table 2. Walleye catch per angler hour ranged from 0 to 2.3 in 2015 (Figure 1). The mean number of Walleye caught per angler hour in 2015 (0.68) was the second highest catch rate observed since 2008. Trends expressed as Walleye caught per rod hour were similar, but with lower values as anglers may fish with 2 rods from a boat on Lake Erie (Table 2). Average catch per boat in 2015 was 14.1 Walleye. Expanding the observed catch from 71 interviews (227 anglers) by the number of participants in the derby (555), the estimated total catch at the 2015 derby was 2,442 Walleye. After deducting released fish, estimated harvest was 2,037 Walleye or approximately 6,427 pounds using an assumed relationship between length and weight. Estimated derby Walleye catch and harvest in 2015 were above time series means (Table 3). The total length (cm) frequency distributions of Walleye measured in 2014-2015 derbies are presented in Figure 2 along with mean length in 2008-2015 derbies. Mean length of harvested Walleye measured at the 2015 derby was smaller than previous years. The largest Walleye caught in the 2015 Colchester Derby was 31 1/16" (79 cm).

TABLE 1. Number of Walleye scanned, PIT tag and acoustic tag recaptures 2008 - 2015.

YEAR	WALLEYE SCANNED	# PIT TAG RECAPTURES	ACOUSTIC TRANSMITTERS
2008	707	1	N/A
2009	486	0	N/A
2010	300	0	N/A
2011	326	0	1
2012	338	0	0
2013	473	0	0
2014	263	0	0
2015	255	0	0

TABLE 2. Walleye harvest, catch and release (in numbers of walleye), effort and associated rates based on interviews 2008 - 2015.

YEAR	# BOATS INTERVIEWED (SAMPLES)	ANGLERS	RODS	ANGLERS / BOAT	RODS / BOAT	RODS / ANGLER	ANGLER HOURS	ROD HOURS	WALLEYE HARVEST	RELEASED	TOTAL CATCH
2008	76	226	354	2.97	4.66	1.57	1,582	2,523	719	377	1,096
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
2012	51	159	275	3.12	5.39	1.73	1,098	1,921	509	45	554
2013	59	182	309	3.08	5.24	1.70	1,207	2,042	584	40	624
2014	56	182	282	3.25	5.04	1.55	1,189	1,854	495	71	566
2015	71	227	366	3.20	5.15	1.61	1,469	2,358	833	166	999

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
2012	3.20	3.48	0.46	0.50	0.04	0.27	0.29	0.02	9.98	10.86	0.88
2013	3.21	3.43	0.48	0.52	0.03	0.29	0.31	0.02	9.90	10.58	0.68
2014	2.72	3.11	0.42	0.48	0.06	0.27	0.31	0.04	8.84	10.11	1.27
2015	3.67	4.40	0.57	0.68	0.11	0.35	0.42	0.07	11.73	14.07	2.34

TABLE 3. Estimated total Walleye harvest (numbers, pounds) and total catch (numbers), expanded based on tournament participation 2008 - 2015.

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
2012	432	1,383	5,630	1,505
2013	521	1,672	7,966	1,786
2014	540	1,469	6,378	1,679
2015	555	2,037	6,427	2,442
MEAN	512	1,513	6,278	1,818

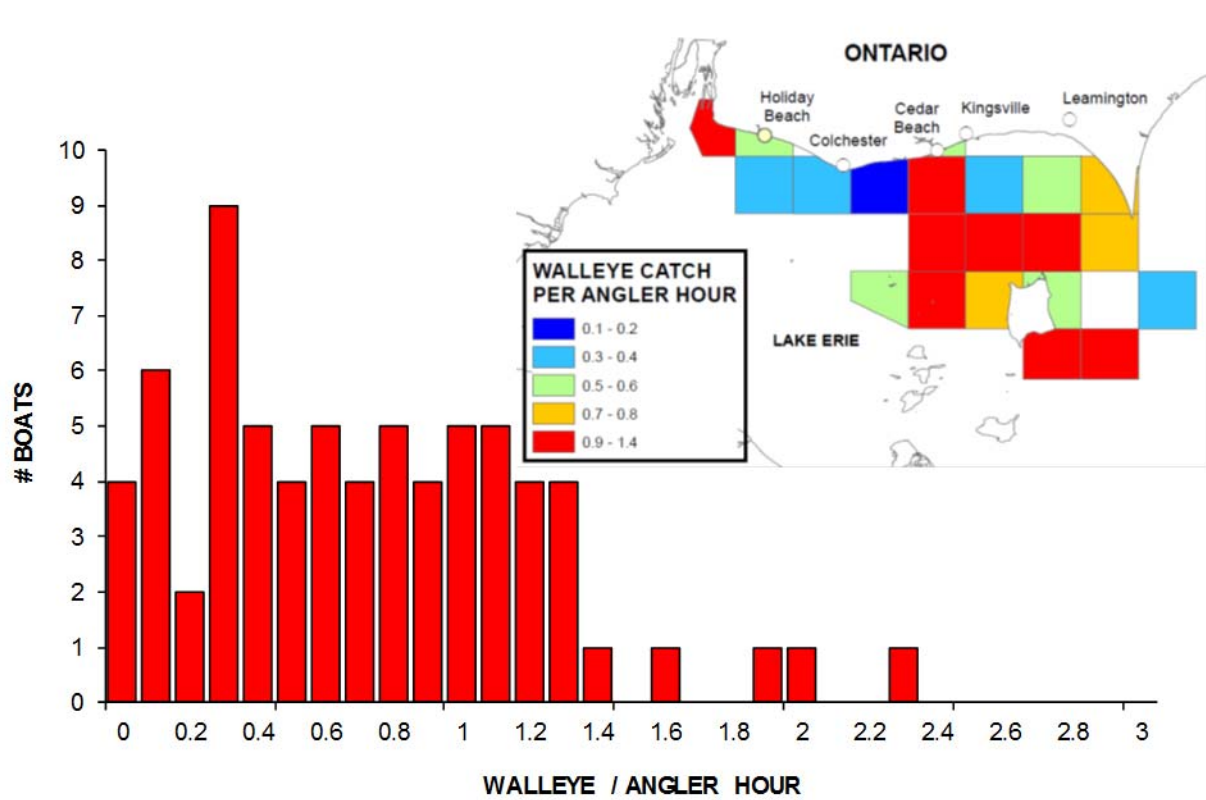


FIGURE 1. Histogram of Walleye catch per angler hour. Mean =0.68 Walleye / angler hour on June 13,2015. Estimated total catch = 2442 Walleye with 2037 Walleye harvested (approximately 6427 pounds). Average Walleye catch per hour in 2015 by 5 minute grid inset.

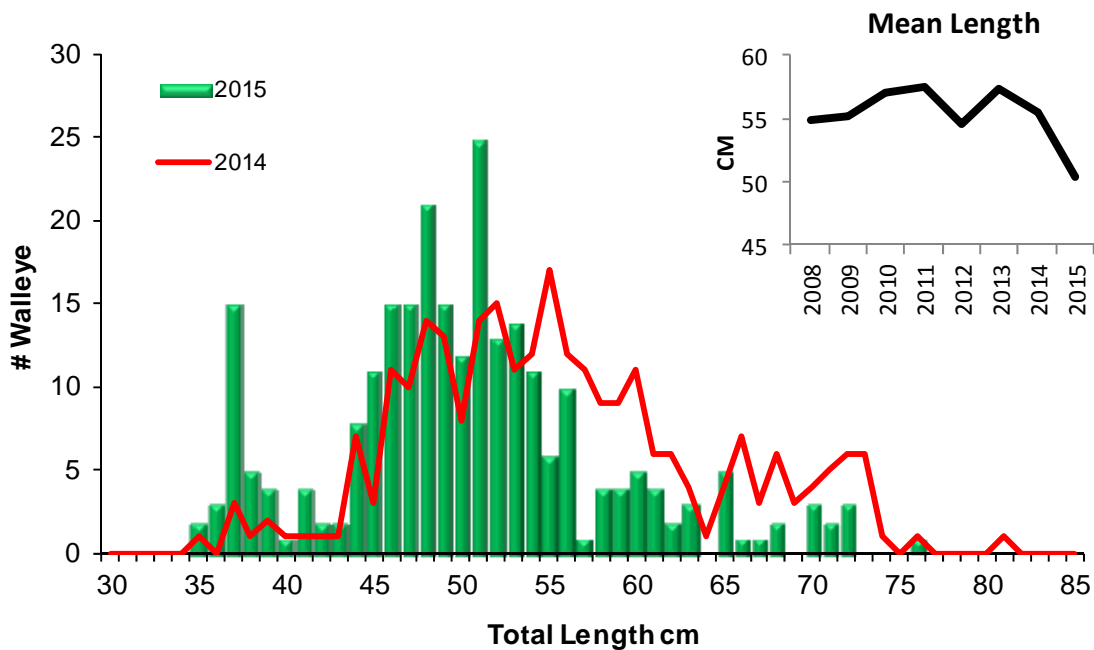


FIGURE 2. Total length frequency distribution of Walleye caught in the Colchester Derby 2014 - 2015. Mean total length (cm) by derby from 2008 to 2015 inset.