

Colchester Walleye Derby, 2014

The Ontario Ministry of Natural Resources attended the Colchester Walleye Derby on June 7, 2014. MNR staff conducted 56 interviews dockside in order to estimate Walleye harvest and catch rates. MNR examined Walleye for tags and recorded total length measurements to describe the size composition of the harvest.

In 2014, none of the 263 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 2008 to 2014 Colchester Walleye derbies, only a single PIT tag was detected (in 2008). No acoustic transmitters were found in Walleye examined in 2014. Information about the Lake Erie Walleye Telemetry Study is available online:

<http://data.glos.us/glatos>

Colchester walleye derby fishery statistics from 2008 to 2014 are presented in Table 2. Walleye catch per angler hour ranged from 0 to 2.7 in 2014 (Figure 1). The mean number of Walleye caught per angler hour in 2014 (0.48) was lower than observed in 2013 (0.52). Catch rate 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 2014 was 10.11 Walleye. Expanding the observed catch from 56 interviews (182 anglers) by the number of participants in the derby (540), the estimated total catch at the 2014 derby was 1,679 Walleye. After deducting released fish, estimated harvest was 1,469 Walleye or approximately 6,378 pounds using an assumed relationship between length and weight. Estimated derby Walleye catch and harvest in 2014 were comparable to 2008-2014 means (Table 3). The total length (cm) frequency distributions of Walleye measured in 2013-2014 derbies are presented in Figure 2 along with mean length in 2008-2014 derbies. The largest Walleye caught in the 2014 Colchester Derby was 32" (81 cm).

TABLE 1. Number of Walleye scanned, PIT tag and acoustic tag recaptures 2008 - 2014.

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

TABLE 2. Walleye harvest, catch and release (in numbers of walleye), effort and associated rates based on interviews 2008 - 2014.

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	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

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

TABLE 3. Estimated total Walleye harvest (numbers, pounds) and total catch (numbers), expanded based on tournament participation 2008 - 2014.

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
MEAN	506	1,438	6,257	1,729

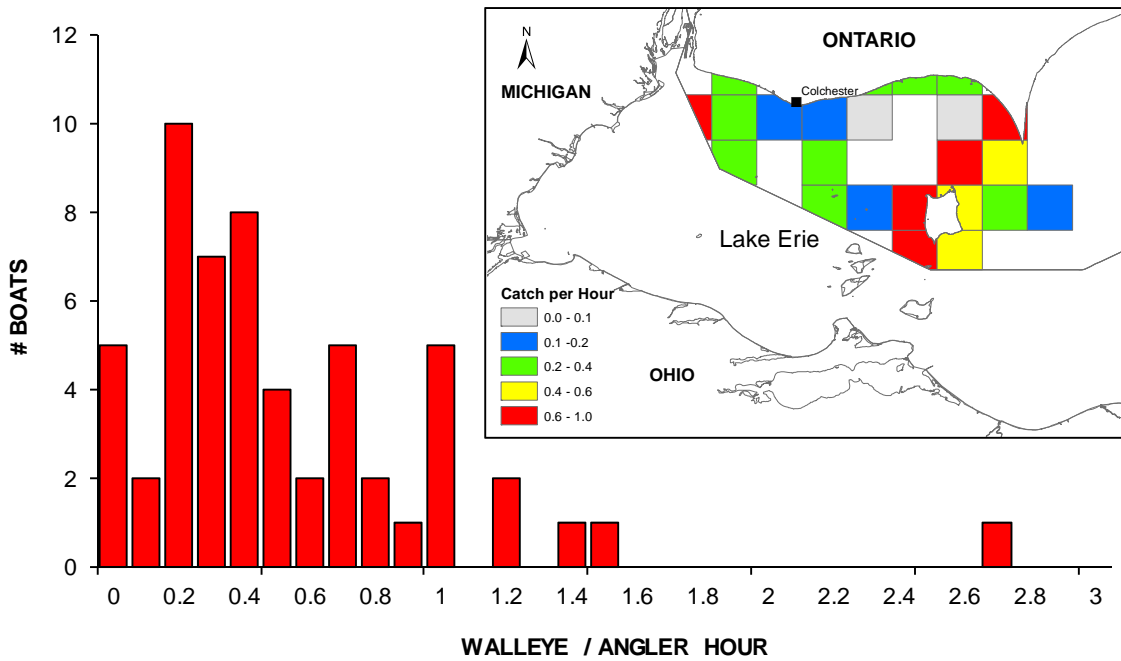


FIGURE 1. Histogram of Walleye catch per angler hour. Mean = 0.48 Walleye / angler hour on June 7, 2014. Estimated total catch = 1679 Walleye with 1469 Walleye harvested (approximately 6378 pounds). Average Walleye catch per hour in 2014 by 5 minute grid inset.

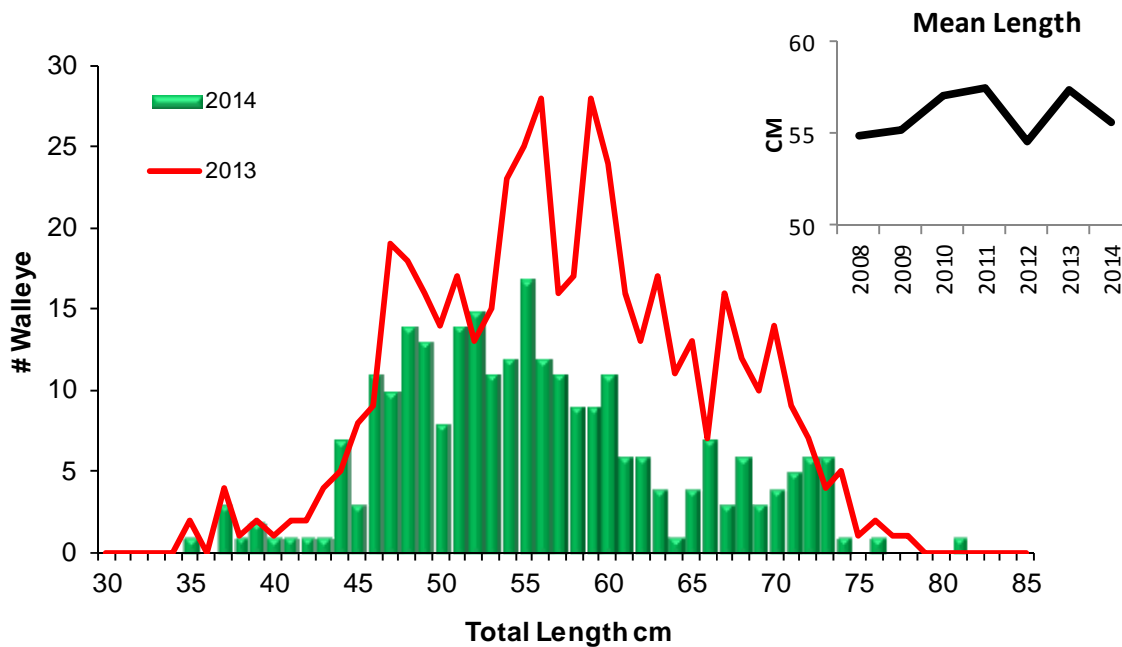


FIGURE 2. Total length frequency distribution of Walleye caught in the Colchester Derby 2013 - 2014. Mean total length (cm) by derby from 2008 to 2014 inset.