



Salmon Ambassadors

2014 Results by Port

Prior to the 2014 fishing season, 125 anglers volunteered to participate in the *Salmon Ambassadors* program. The program involved measuring **each and every** Chinook Salmon caught over the course of the fishing season, checking each Chinook Salmon for an adipose fin clip, and recording this information along with the date and location of each catch.

The *Salmon Ambassadors* results presented in this report focus on the contribution of stocked (fin-clipped) and wild (unclipped) Chinook Salmon to ports around Lake Michigan and northern Lake Huron. At the end of the 2014 season, 71 anglers returned surveys and 59 provided useable data on 3,460 Chinook Salmon.

Registered volunteers represented over 25 Lake Michigan and northern Lake Huron ports. Due to the low numbers of fish reported at some ports, several of the following fact sheets group two or more ports into a larger area. Volunteers in northwest Michigan (from Frankfort, Leland, and Grand Traverse Bay) reported 15 fish (14 of which were wild) and these are not included on fact sheets.

The *Salmon Ambassadors* program is a Michigan Sea Grant initiative developed in coordination with Michigan, Wisconsin, Illinois, and Indiana DNRs, and the U.S. Fish & Wildlife Service. This program would not be possible without the effort of dedicated volunteers from organizations including Michigan Steelhead & Salmon Fishermen's Association and Michigan Charter Boat Association. Special thanks go out to Detroit Area Steelheaders, who provided a generous donation to support this program.

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Interpretation of Fact Sheets

Fact sheets include complete and nearly complete data sets. Results from anglers who did not collect data on >5% of Chinooks May-Sep. are not included.

Numbers represent average values reported by volunteers. These opinions are color coded:

- 1-1.9 = RED
- 2-2.9 = ORANGE
- 3-3.9 = YELLOW
- 4-5.0 = GREEN



Salmon Ambassadors 2014 Results Ludington Area (includes Ludington and Pentwater)



Volunteers were asked if they agreed with the following:

- "I was pleased with my fishing experiences this season."
- "Fishing for Chinook Salmon was good from May-June."
- "Fishing for Chinook Salmon was good from July-September."

Answers ranged from 1 (Strongly Disagree) to 5 (Strongly Agree).

Number of volunteers reporting all catches **10**

Chinook Salmon caught by volunteers **750**

Average length of Chinook Salmon **28.4"**

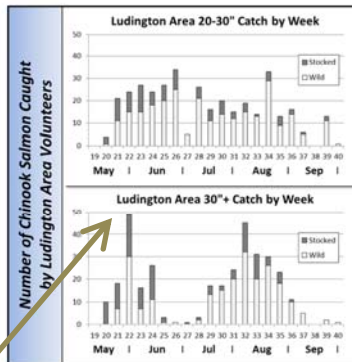
Average length of stocked Chinook **29.4"**

Average length of wild Chinook **28.0"**

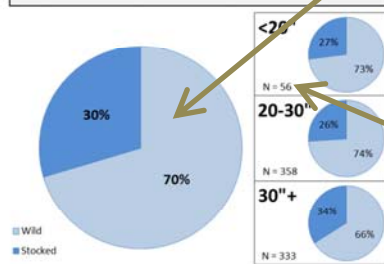
These graphs show weekly trends for two length groups.

20-30" Chinooks were mostly Age 2. Larger (30"+) fish were a mix of Age 2, Age 3, and a few Age 4 Chinooks.

In the Ludington area, fishing for large Chinooks peaked in late May and again in early August. Fishing was more consistent for 20-30" fish.



Stocked & Wild Chinook Salmon Catch



Salmon Ambassadors found that 70% of Chinook Salmon caught in the Ludington area in 2014 were wild. Although it appeared that a slightly lower percentage of large (30"+) Chinooks were wild, size had no significant effect on % wild. Location also did not have a statistically significant effect on % wild, but season did; Chinook Salmon caught in Jul-Sep. were more likely to be wild than those caught May-Jun in the Ludington area (see below).

This large pie chart includes Chinooks of all sizes.

The smaller pie charts separate the same fish into three different length groups.

"N" is the number of fish included in each length group. In all cases, small (<20") fish were the least common.

This table is the only place on fact sheet that displays separate data for each port.

	Ludington			Pentwater		
	Stocked Chinooks Caught	Wild Chinooks Caught	% Wild	Stocked Chinooks Caught	Wild Chinooks Caught	% Wild
May	58	54	48%	6	12	67%
Jun	56	91	62%	8	20	71%
Jul	31	100	76%	7	17	71%
Aug	39	171	81%	14	19	58%
Sep	2	3	95%	1	6	86%
TOTAL	186	453	71%	36	74	67%

Seasonal Effect

The Ludington area was the only region that showed a significant change in % wild from early (N=305) to late (N=443) in the year.

May-Jun: 58% wild

Jul-Sep: 79% wild

Some fact sheets include an extra graph or text box in the lower right hand corner.

This caption explains which differences are truly meaningful. Statistical testing requires a relatively large number of fish to detect a "significant" difference. Small differences in % wild require a relatively large number of fish to detect.

Technical Note:

The χ^2 test for proportions was used to test for differences in % wild. In cases where multiple comparisons were required, the α -level (0.05) was divided by the number of comparisons to avoid compromising α .

In this example, there is a small difference (4%) between % wild in Ludington and Pentwater.

The number of fish caught in Pentwater was relatively low and the statistical test could not detect a "significant" difference between Ludington and Pentwater.

SALMON AMBASSADORS: Angler Science Project

www.miseagrant.umich.edu/salmon-ambassadors



Salmon Ambassadors 2014 Results

Ludington Area (includes Ludington and Pentwater)



Volunteers were asked if they agreed with the following:

"I was pleased with my fishing experiences this season."

"Fishing for Chinook Salmon was good from May-June."

"Fishing for Chinook Salmon was good from July-September."

Answers ranged from 1 (Strongly Disagree) to 5 (Strongly Agree).

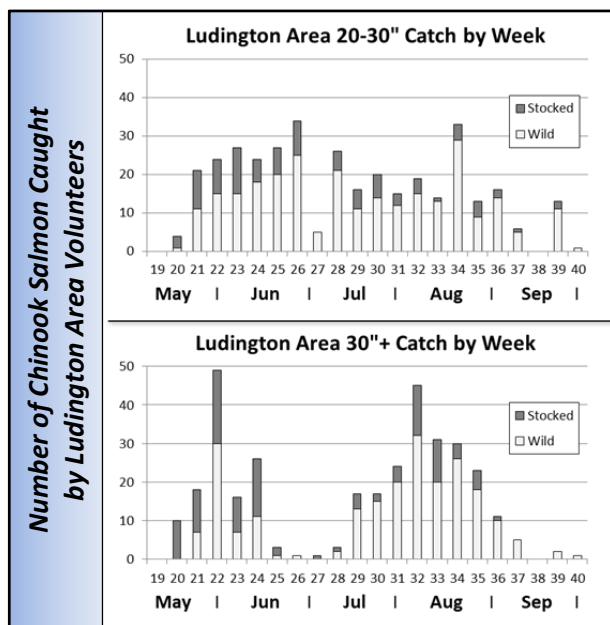
Number of volunteers reporting all catches **10**

Chinook Salmon caught by volunteers **750**

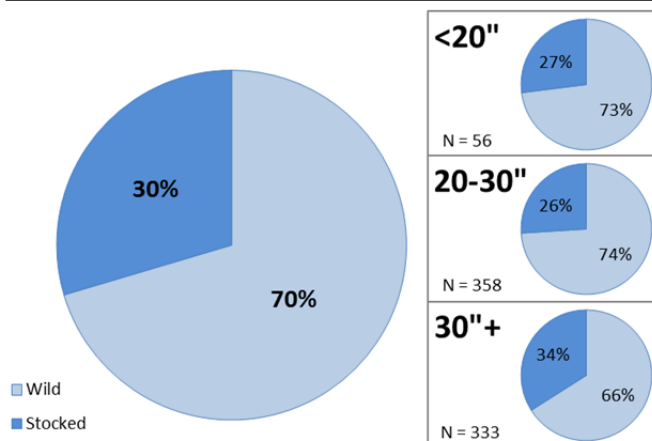
Average length of Chinook Salmon **28.4"**

Average length of stocked Chinook **29.4"**

Average length of wild Chinook **28.0"**



Stocked & Wild Chinook Salmon Catch



Salmon Ambassadors found that 70% of Chinook Salmon caught in the Ludington area in 2014 were wild. Although it appeared that a slightly lower percentage of large (30"+) Chinooks were wild, size had no significant effect on % wild. Location also did not have a statistically significant effect on % wild, but season did; Chinook Salmon caught in Jul-Sep were more likely to be wild than those caught May-Jun in the Ludington area (see below).

	Ludington			Pentwater		
	Stocked	Wild	% Wild	Stocked	Wild	% Wild
	Chinooks	Chinooks		Chinooks	Chinooks	
	Caught	Caught		Caught	Caught	
May	58	54	48%	6	12	67%
Jun	56	91	62%	8	20	71%
Jul	31	100	76%	7	17	71%
Aug	39	171	81%	14	19	58%
Sep	2	37	95%	1	6	86%
TOTAL	186	453	71%	36	74	67%

Seasonal Effect

The Ludington area was the only region that showed a significant change in % wild from early (N=305) to late (N=443) in the year.

May-Jun: 58% wild

Jul- Sep: 79% wild



Salmon Ambassadors 2014 Results

Manistee



Volunteers were asked if they agreed with the following:

"I was pleased with my fishing experiences this season."

"Fishing for Chinook Salmon was good from May-June."

"Fishing for Chinook Salmon was good from July-September."

Answers ranged from 1 (Strongly Disagree) to 5 (Strongly Agree).

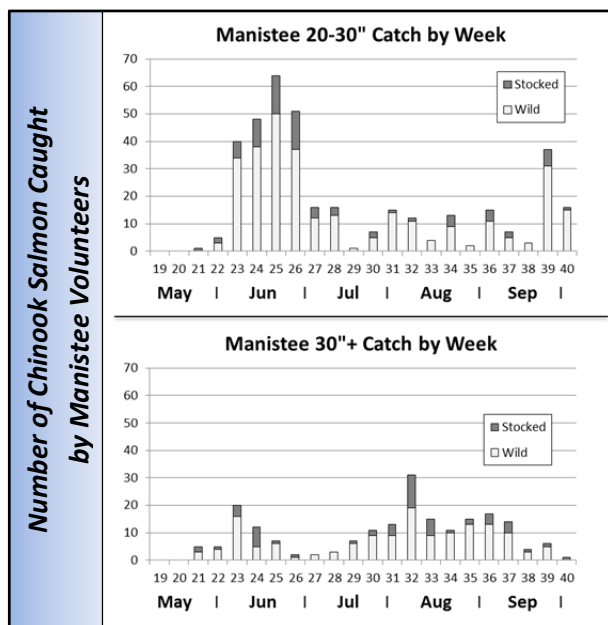
Number of volunteers reporting all catches **4**

Chinook Salmon caught by volunteers **679**

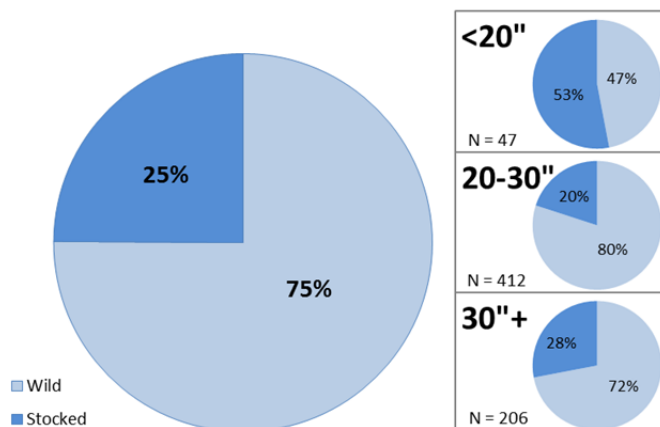
Average length of Chinook Salmon **29.5"**

Average length of stocked Chinook **30.5"**

Average length of wild Chinook **29.1"**



Stocked & Wild Chinook Salmon Catch



Salmon Ambassadors found that 75% of Chinook Salmon caught from Manistee in 2014 were wild. Size had a significant effect on % wild. A lesser percentage of small (<20") fish were wild.

	Manistee		
	Stocked	Wild	% Wild
	Chinooks Caught	Chinooks Caught	
May	6	10	63%
Jun	80	209	72%
Jul	18	64	78%
Aug	29	91	76%
Sep	20	88	81%
Oct	16	48	75%
TOTAL	169	510	75%

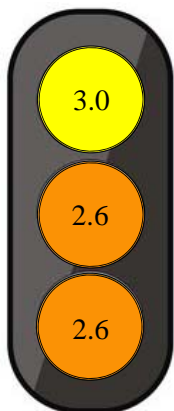
A Note on Rivers...

Six of our 2014 volunteers primarily fished rivers for Chinook Salmon. Several anglers reported slow fishing during the fall run, and only six fish were reported by our river volunteers. One trip taken on the Manistee River produced three wild fish, and another on the Muskegon River also produced three wild fish.



Salmon Ambassadors 2014 Results

Grand Haven Area (includes Holland to Muskegon)



Volunteers were asked if they agreed with the following:

"I was pleased with my fishing experiences this season."

"Fishing for Chinook Salmon was good from May-June."

"Fishing for Chinook Salmon was good from July-September."

Answers ranged from 1 (Strongly Disagree) to 5 (Strongly Agree).

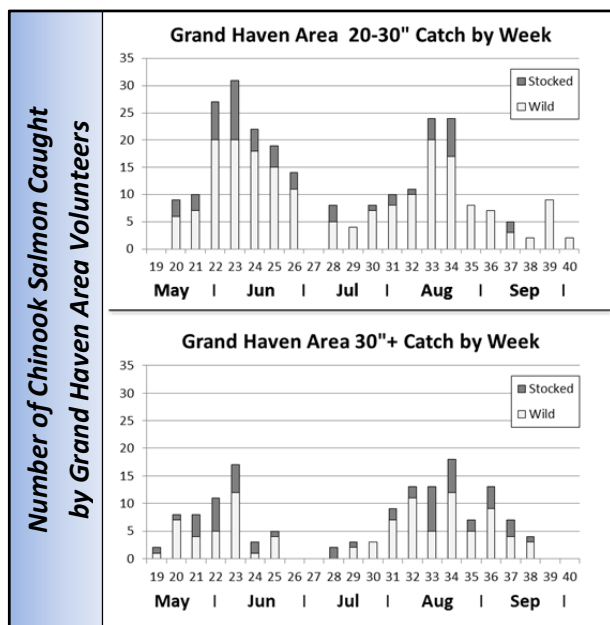
Number of volunteers reporting all catches **10**

Chinook Salmon caught by volunteers **427**

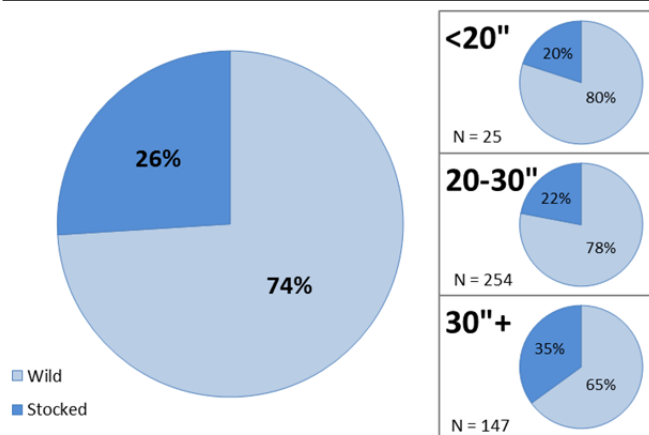
Average length of Chinook Salmon **27.9"**

Average length of stocked Chinook **29.1"**

Average length of wild Chinook **27.4"**



Stocked & Wild Chinook Salmon Catch



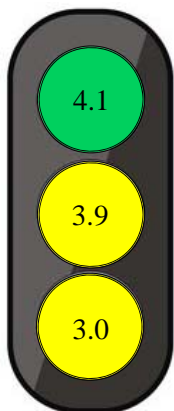
Salmon Ambassadors found that 74% of Chinook Salmon caught in the Grand Haven area in 2014 were wild. Size had a significant effect on % wild. Chinook Salmon over 30" long were less likely to be wild than smaller fish. Location did not have a statistically significant effect on % wild. Although Holland, Grand Haven and Muskegon appeared to differ slightly these differences were not significant (see below).

	Holland			Grand Haven			Muskegon		
	Stocked Chinooks Caught	Wild Chinooks Caught	% Wild	Stocked Chinooks Caught	Wild Chinooks Caught	% Wild	Stocked Chinooks Caught	Wild Chinooks Caught	% Wild
May	5	4	44%	19	49	72%	2	6	75%
Jun	5	12	71%	22	54	71%	6	21	78%
Jul	2	8	80%	4	17	81%	3	5	63%
Aug	8	18	69%	20	62	76%	6	30	83%
Sep	5	14	74%	3	12	80%	1	3	75%
TOTAL	25	56	69%	68	194	74%	18	65	78%



Salmon Ambassadors 2014 Results

South Haven



Volunteers were asked if they agreed with the following:

"I was pleased with my fishing experiences this season."

"Fishing for Chinook Salmon was good from May-June."

"Fishing for Chinook Salmon was good from July-September."

Answers ranged from 1 (Strongly Disagree) to 5 (Strongly Agree).

Number of volunteers reporting all catches

7

Chinook Salmon caught by volunteers

296

Average length of Chinook Salmon

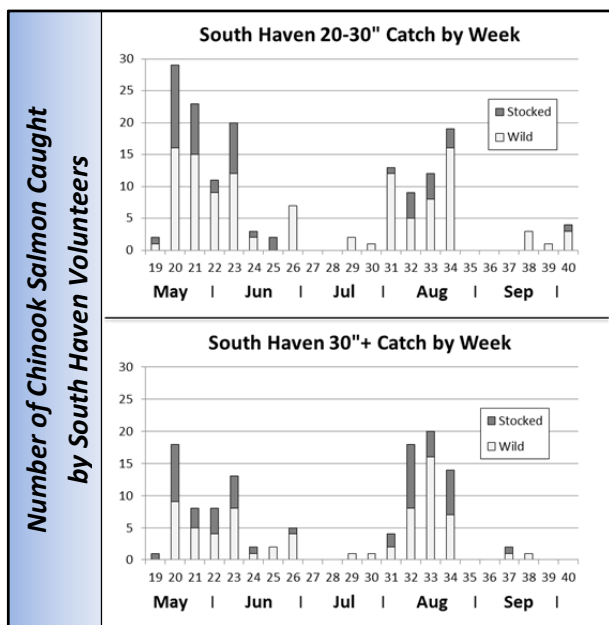
28.4"

Average length of stocked Chinook

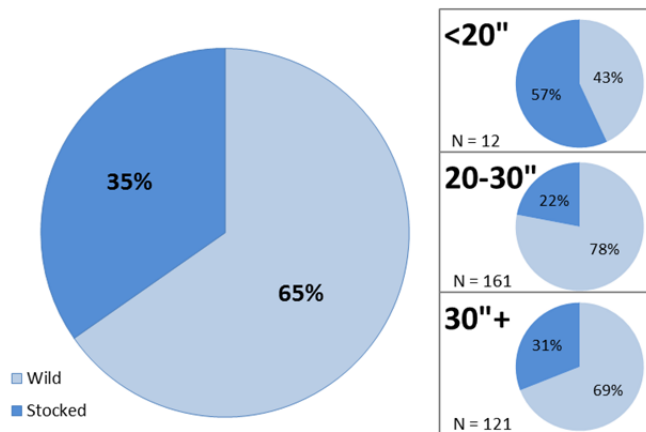
29.0"

Average length of wild Chinook

28.0"

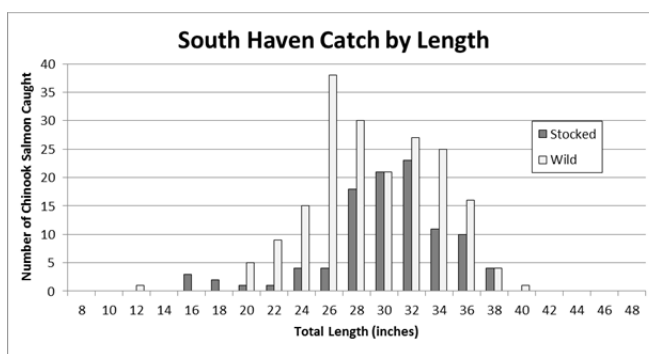


Stocked & Wild Chinook Salmon Catch



Salmon Ambassadors found that 65% of Chinook Salmon caught in South Haven during 2014 were wild. Size had no significant effect on % wild. Although it appeared that the three length groups show above were different, these differences were not meaningful.

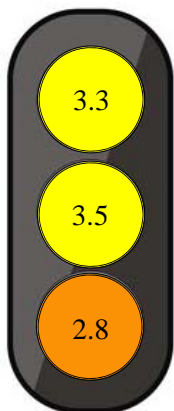
	South Haven		
	Stocked	Wild	% Wild
	Chinooks Caught	Chinooks Caught	
May	46	61	57%
Jun	18	38	68%
Jul	2	9	82%
Aug	33	71	68%
Sep	3	10	77%
TOTAL	102	189	65%





Salmon Ambassadors 2014 Results

St. Joseph (includes St. Joseph and Benton Harbor)



Volunteers were asked if they agreed with the following:

"I was pleased with my fishing experiences this season."

"Fishing for Chinook Salmon was good from May-June."

"Fishing for Chinook Salmon was good from July-September."

Answers ranged from 1 (Strongly Disagree) to 5 (Strongly Agree).

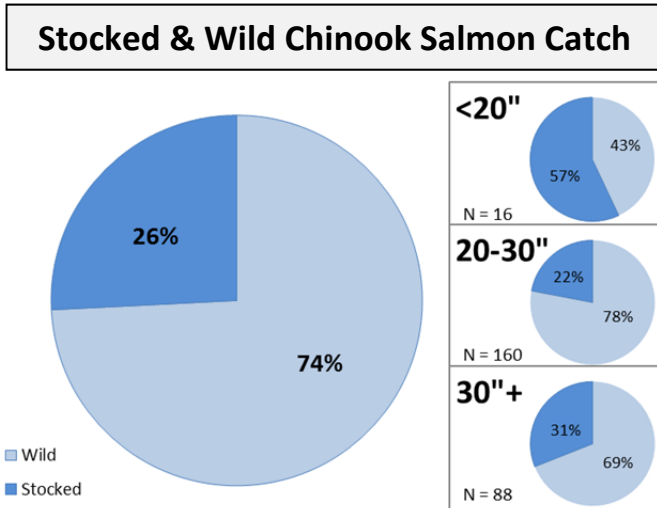
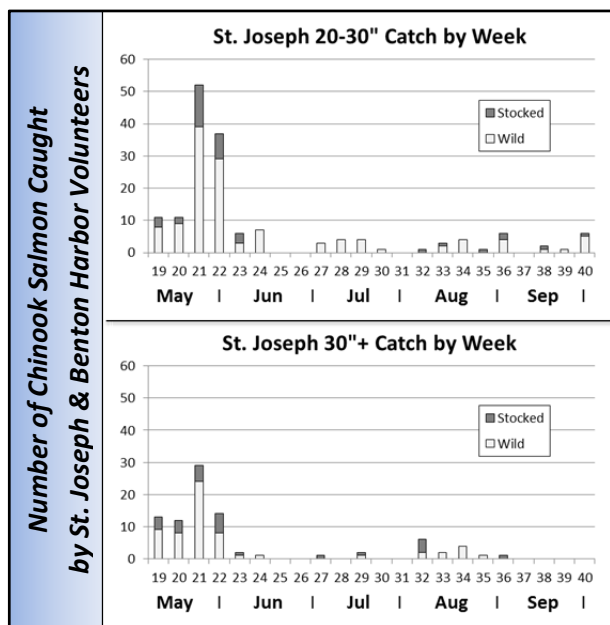
Number of volunteers reporting all catches **4**

Chinook Salmon caught by volunteers **264**

Average length of Chinook Salmon **28.2"**

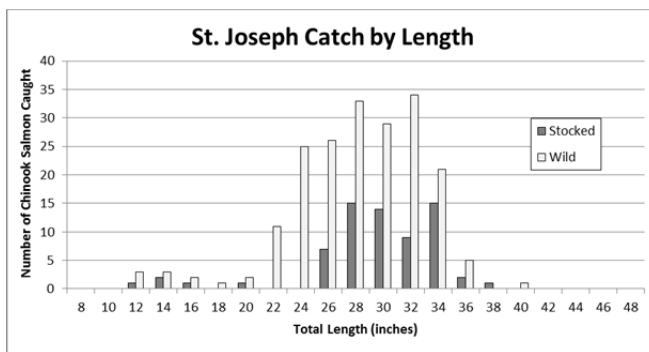
Average length of stocked Chinook **28.7"**

Average length of wild Chinook **27.8"**



Salmon Ambassadors found that 74% of Chinook Salmon caught from St. Joseph & Benton Harbor in 2014 were wild. Size had no significant effect on % wild. Although it appeared that a lesser percentage of small (<20") fish were wild, this difference was not meaningful.

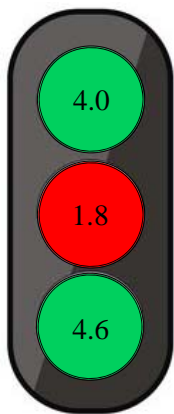
	St. Joseph & Benton Harbor		
	Stocked	Wild	% Wild
	Chinooks	Chinooks	
	Caught	Caught	
May	49	145	75%
Jun	4	12	75%
Jul	2	13	87%
Aug	7	15	68%
Sep	6	9	60%
TOTAL	68	194	74%





Salmon Ambassadors 2014 Results

Door Peninsula (includes Kewaunee to Washington Island)



Volunteers were asked if they agreed with the following:

"I was pleased with my fishing experiences this season."

"Fishing for Chinook Salmon was good from May-June."

"Fishing for Chinook Salmon was good from July-September."

Answers ranged from 1 (Strongly Disagree) to 5 (Strongly Agree).

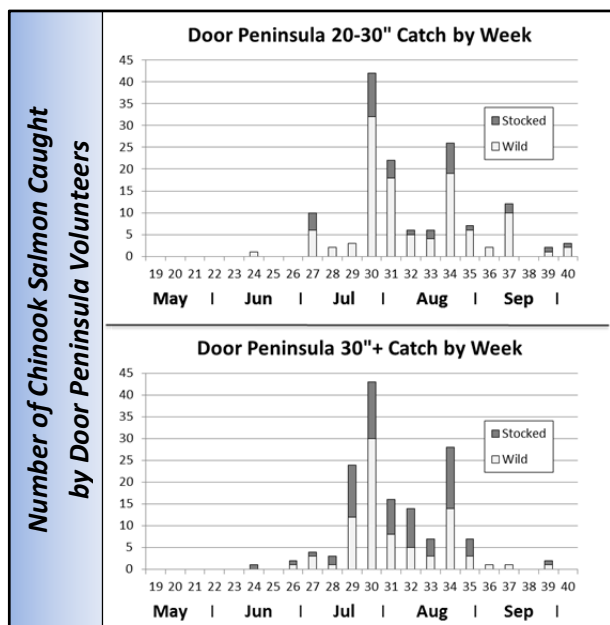
Number of volunteers reporting all catches **4**

Chinook Salmon caught by volunteers **321**

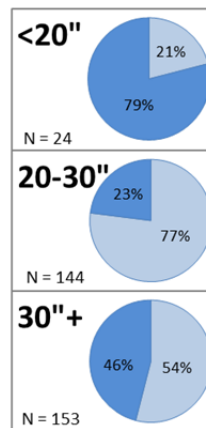
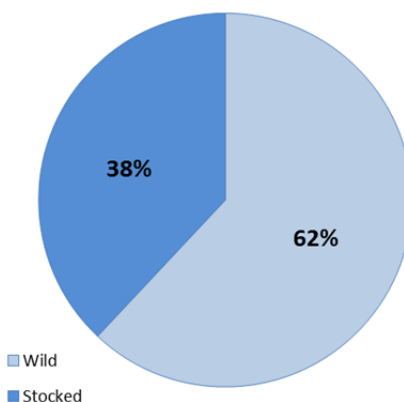
Average length of Chinook Salmon **28.9"**

Average length of stocked Chinook **29.2"**

Average length of wild Chinook **28.8"**



Stocked & Wild Chinook Salmon Catch



Salmon Ambassadors found that 62% of Chinook Salmon caught in the Door Peninsula area in 2014 were wild. Length had a statistically significant effect on % wild, with each of the three length groups shown above having a different % wild. Location did not have a significant effect on % wild. Although Kewaunee appeared to have a lower % wild, this difference was not meaningful (see below).

	Gills Rock & Washington Is.			Kewaunee		
	Stocked	Wild	% Wild	Stocked	Wild	% Wild
	Chinooks	Chinooks		Chinooks	Chinooks	
	Caught	Caught		Caught	Caught	
May	0	0	-	0	0	-
Jun	1	1	50%	1	1	50%
Jul	54	92	63%	5	4	44%
Aug	49	70	59%	3	5	63%
Sep	7	19	73%	0	0	-
TOTAL	111	182	62%	9	10	53%



Salmon Ambassadors 2014 Results

Southern Wisconsin (Illinois border to Port Washington)



Volunteers were asked if they agreed with the following:

"I was pleased with my fishing experiences this season."

"Fishing for Chinook Salmon was good from May-June."

"Fishing for Chinook Salmon was good from July-September."

Answers ranged from 1 (Strongly Disagree) to 5 (Strongly Agree).

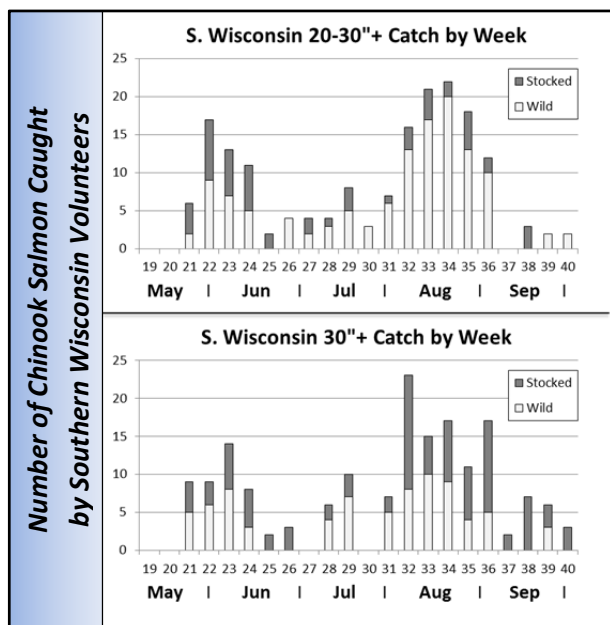
Number of volunteers reporting all catches **8**

Chinook Salmon caught by volunteers **328**

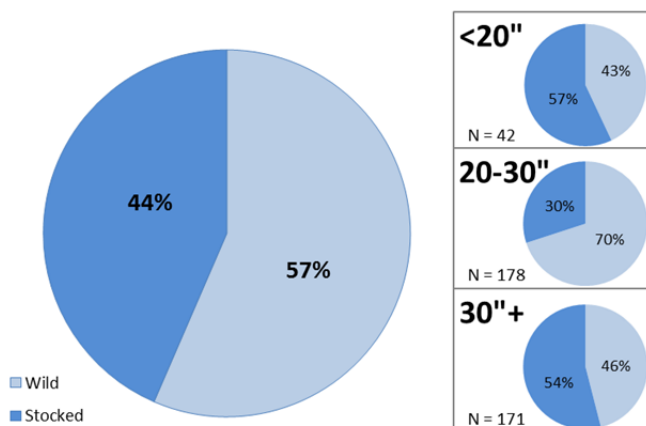
Average length of Chinook Salmon **28.3"**

Average length of stocked Chinook **28.9"**

Average length of wild Chinook **27.8"**



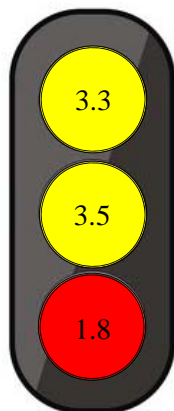
Stocked & Wild Chinook Salmon Catch



	Port Washington & Milwaukee			Racine & Kenosha		
	Stocked Chinooks Caught	Wild Chinooks Caught	% Wild	Stocked Chinooks Caught	Wild Chinooks Caught	% Wild
May	3	0	0%	19	24	56%
Jun	7	2	22%	31	31	50%
Jul	4	19	83%	13	14	52%
Aug	7	22	76%	52	88	63%
Sep	6	6	50%	26	12	32%
TOTAL	27	49	64%	141	169	55%



Salmon Ambassadors 2014 Results Illinois



Volunteers were asked if they agreed with the following:

"I was pleased with my fishing experiences this season."

"Fishing for Chinook Salmon was good from May-June."

"Fishing for Chinook Salmon was good from July-September."

Answers ranged from 1 (Strongly Disagree) to 5 (Strongly Agree).

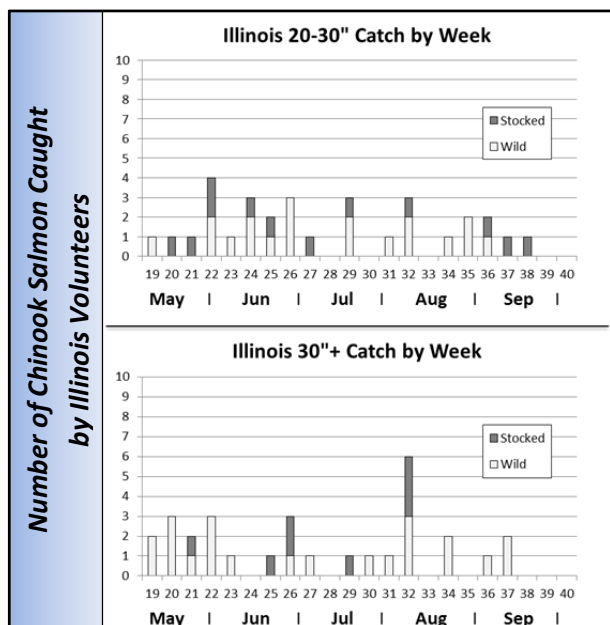
Number of volunteers reporting all catches **4**

Chinook Salmon caught by volunteers **63**

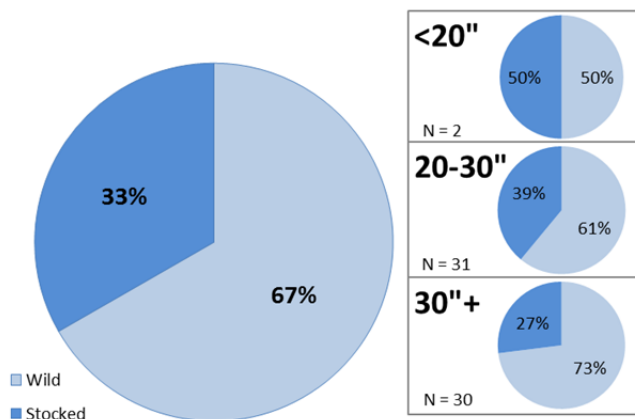
Average length of Chinook Salmon **29.1"**

Average length of stocked Chinook **28.5"**

Average length of wild Chinook **29.5"**

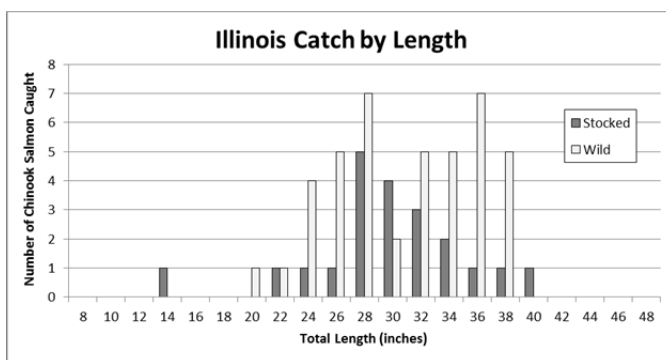


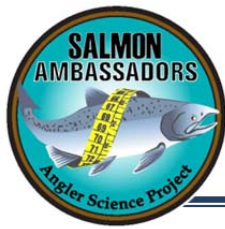
Stocked & Wild Chinook Salmon Catch



Salmon Ambassadors found that 67% of Chinook Salmon caught from Illinois ports in 2014 were wild. Salmon length had no statistically significant effect on % wild. Although large (30"+) Chinook salmon appeared to have a greater % wild, this difference was not meaningful.

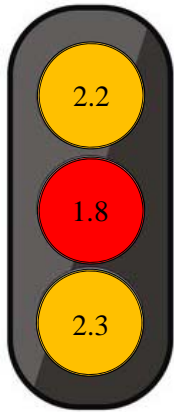
	Illinois		
	Stocked	Wild	% Wild
	Chinooks Caught	Chinooks Caught	
May	5	12	71%
Jun	6	10	63%
Jul	2	5	71%
Aug	6	11	65%
Sep	2	4	67%
TOTAL	21	42	67%





Salmon Ambassadors 2014 Results

Northern Lake Huron (St. Ignace to Alpena)



Volunteers were asked if they agreed with the following:

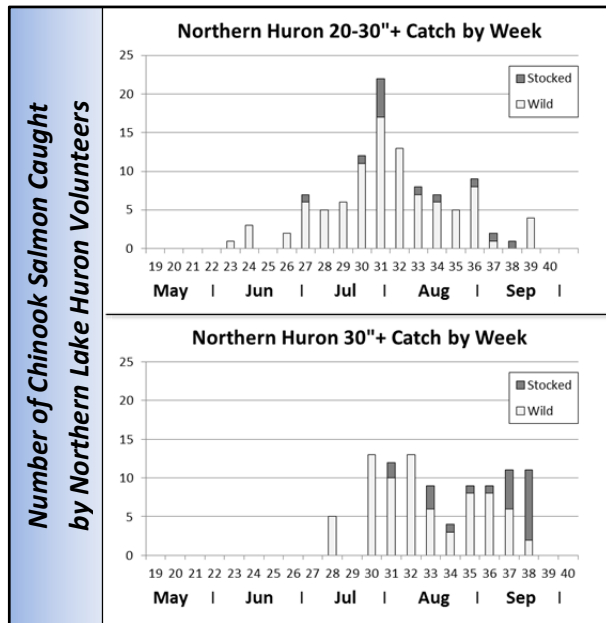
"I was pleased with my fishing experiences this season."

"Fishing for Chinook Salmon was good from May-June."

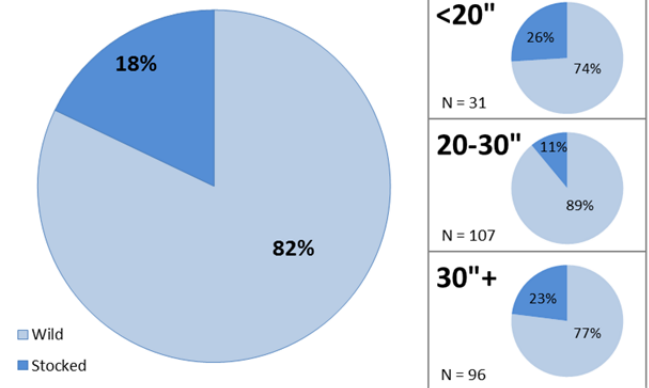
"Fishing for Chinook Salmon was good from July-September."

Answers ranged from 1 (Strongly Disagree) to 5 (Strongly Agree).

Number of volunteers reporting all catches	5
Chinook Salmon caught by volunteers	234
Average length of Chinook Salmon	27.5"
Average length of stocked Chinook	28.0"
Average length of wild Chinook	27.3"



Stocked & Wild Chinook Salmon Catch



Salmon Ambassadors found that 82% of Chinook Salmon caught in northern Lake Huron in 2014 were wild. Although it appeared that a higher percentage of small (<20") and large (30"+) Chinook Salmon were wild, size did not have a significant effect on % wild. However, the location did have a statistically significant effect, with each area of northern Lake Huron producing a different % wild (see below).

	Straits to Mackinac Island			Rogers City			Presque Isle		
	Stocked	Wild	% Wild	Stocked	Wild	% Wild	Stocked	Wild	% Wild
	Chinooks Caught	Chinooks Caught		Chinooks Caught	Chinooks Caught		Chinooks Caught	Chinooks Caught	
May	0	0	-	0	0	-	0	0	-
Jun	0	2	100%	0	4	100%	0	0	100%
Jul	4	25	86%	0	8	100%	2	36	95%
Aug	6	25	81%	9	19	68%	0	47	100%
Sep	4	6	60%	16	3	16%	1	13	93%
TOTAL	14	58	81%	25	34	58%	3	96	97%