

2011 Sturgeon Fishing Report Card: Preliminary Data Report

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Summary

The 2011 Sturgeon Fishing Report Card (Card) was issued to anglers at no charge through the Automated License Data System (ALDS). Approximately 112,000 Cards were issued in 2011, which was many more than in previous years. As of 08-Mar-2012¹, 9,841 Cards were returned to the Department and 1,831 of those Cards had data on sturgeon catch.

Anglers reported the release of 89 green sturgeon, retention of 1,652 white sturgeon, and release of 3,396 white sturgeon. Anglers reported total length measurements for 27 green sturgeon (range 13-71 inches, average 31.3 inches). Of the white sturgeon retained, anglers reported total length measurements for 1,645 (range 40-66 inches², average 55.0 inches). Of the white sturgeon released, anglers reported a total length measurement for 895 fish (range 12-96 inches, average 42.9 inches).

Catch of green sturgeon was greatest in San Pablo and Suisun bays. Catch of white sturgeon was greatest in Suisun Bay and in the Sacramento River from Rio Vista to Chipps Island.

Introduction

This report summarizes data from the 2011 California Sturgeon Fishing Report Card (Card). The Card became part of a suite of sport fishing regulations in March 2007 that was intended to protect California's year-round white sturgeon fishery while increasing protections for the federally-threatened green sturgeon population and adding resiliency to the conservation-dependent white sturgeon population.

The 2011 Card was distributed to any angler at no charge exclusively³ through the Automated License Data System (ALDS) and was required of every angler — including minors, anglers fishing only from piers, and anglers fishing on 'free fishing' days — to fish for or retain a sturgeon in California.

Cards included fields for contact information, retained fish, and released fish (Appendix 1). To aid the Department's efforts to reduce illegal commercialization of sturgeon and to enforce the daily and annual bag limits on white sturgeon, the Cards included detachable single-use serially-numbered Card-specific tags to be placed on fish retained by anglers.

Information on catch of sturgeon from 2011 Cards is complementary to on-going research conducted by the Department and others and will be used in planned articles and technical reports.

Card Distribution and Return

Approximately 112,000 Cards were issued to anglers. Anglers began returning Cards almost immediately after distribution. Cards returned during and after preparation of this report began were not described here (cutoff date 08-Mar-2012¹). Nine thousand eight hundred forty-one (9,841) Cards were returned of which 4,432 had no data (effort but no catch), 3,578 indicated no fishing effort, and 1,831 had data on sturgeon catch.

Angler Data

The Card included fields for general, personal, and contact information, as well as for catch data and — if applicable — the code number of any DFG-applied disk tag (Appendix 1). Contact information included name, street address, and city.

¹ We are summarizing data at this point because the number of Cards with catch data is (roughly) the same as previous years and we can only guess how many more Cards will be returned

² See notes 1 and 2 in 'Length Data' section

³ A small subset of 2010 Cards were issued through ALDS.

Catch Data

The Card contained three sections for reporting sturgeon catch: (1) Sturgeon Retained, (2) Sturgeon Released (no reward disk present), and (3) Sturgeon Released (reward disk present). These sections included fields to report month, day, location, and reward disk number. The 'Sturgeon Retained' section also contained a field for reporting length and reminded anglers that only white sturgeon 44–66 inches total length may be retained. The 'Sturgeon Released (no reward disk present)' section also contained check boxes for species identification that some anglers also used to report fish length.

Thirty-two (32) anglers each caught one tagged sturgeon (Table 1). One of the 32 anglers reported catching (and releasing) the same tagged fish (HH1001⁴) on three separate occasions, and this tagged fish also was reportedly caught and released by two other anglers (Table 1). Of the 22 tagged white sturgeon, seven were released and 15 were retained. Of the 12 sturgeon where species was not given or unknown, all were released. No tagged green sturgeon were reported. All species were identified as white sturgeon when tagged by the Department (Table 1).

Table 1. Angler-reported tag recaptures from 2011 Card with corresponding CDFG tagging data; table sorted by date tagged

Angler-reported Tag Recaptures						CDFG Tagging Data			Days at large
Date	Location	Species	Retained	Total Length (inches)	Tag Number	Date Tagged	Species	Total Length (inches)	
18-Jan	San Pablo Bay	Unknown	No		FF0617	16-Oct-01	White	55	3,381
7-Dec	Sacramento River: Red Bluff to Colusa	Unknown	No		HH1001	15-Aug-06	White	49	1,940
16-Dec	Sacramento River: Rio Vista to Chipps Island	Unknown	No		HH1001 ^b	15-Aug-06	White	49	1,949
16-Dec	Sacramento River: Knights Landing to Rio Vista	White	No		HH1001	15-Aug-06	White	49	1,949
20-Dec	Sacramento River: Rio Vista to Chipps Island	Unknown	No		HH1001 ^b	15-Aug-06	White	49	1,953
21-Dec	Sacramento River: Rio Vista to Chipps Island	Unknown	No		HH1001 ^b	15-Aug-06	White	49	1,954
14-Dec	Sacramento River: Knights Landing to Rio Vista	Unknown	No		ST12137	12-Sep-06	White	42	1,919
1-Feb	Sacramento River: Knights Landing to Rio Vista	Unknown	No		HH1221	16-Aug-07	White	54	1,265
23-Jul	Montezuma Slough	White	Yes	47	ST12235	6-Sep-07	White	38	1,416
25-Nov	Sacramento River: Rio Vista to Chipps Island	White	Yes	60	ST12520	10-Sep-07	White	55	1,537
8-Mar	Yolo Bypass	White	Yes	56	FF1534	13-Sep-07	White	56	1,272
30-Dec	Sacramento Deepwater Ship Channel	White	Yes	66	HH1526	13-Sep-07	White	58	1,569
3-Apr	San Pablo Bay	White	Yes	50	FF1613	20-Aug-08	White	59	956
29-Apr	Sacramento River: Colusa to Knights Landing	Unknown	No		FF1647	29-Aug-08	White	74	973
15-Feb	Sacramento River: Rio Vista to Chipps Island	White	Yes	60	ST12661	4-Sep-08	White	57	894
25-Dec	Sacramento River: Rio Vista to Chipps Island	White	No		HH1678	16-Sep-08	White	70	1,195
21-May	San Pablo Bay	White	No		ST12421	2-Oct-08	White	43	961
23-Apr	Grizzly Bay	White	Yes	47	FF1446	9-Oct-08	White	44	926
22-Jan	Suisun Bay	White	Yes	49	HH1466	20-Oct-08	White	44	824
4-May	Sacramento River: Rio Vista to Chipps Island	White	Yes	46	FF1598	17-Aug-09	White	41	625
30-Dec	Grizzly Bay	White	Yes	48	HH1277	18-Aug-09	White	50	864
11-Dec	Sacramento River: Knights Landing to Rio Vista	White	No		ST12700	2-Sep-09	White	44	830
24-Dec	Napa River	White	Yes	52	FF1792	6-Oct-09	White	47	809
4-Apr	San Pablo Bay	Unknown	No		HH1823	21-Oct-09	White	43	530
19-Apr	San Pablo Bay	White	No		ST12824	21-Oct-09	White	48	545
4-Feb	Suisun Bay	Unknown	No		FF1870	12-Aug-10	White	41	176
25-Nov	Carquinez Strait	White	Yes	55	FF1911	27-Sep-10	White	53	424
19-Nov	Sacramento River: Rio Vista to Chipps Island	White	Yes	53	HH1916	28-Sep-10	White	49	417
21-May	Montezuma Slough	White	No		ST12853	14-Oct-10	White	43	219
7-Nov	Sacramento River: Rio Vista to Chipps Island	White	No	58	FF2143	13-Sep-11	White	58	55
12-Nov	Sacramento River: Rio Vista to Chipps Island	White	Yes	60	ST13157	27-Sep-11	White	59	46
31-Dec	San Francisco Bay: South of Hwy 80	White	Yes	47	HH2175	17-Oct-11	White	50	75
27-Mar	San Pablo Bay	Unknown	No		1843	a	White	a	a
19-Jun	San Pablo Bay	Unknown	No		1856	a	White	a	a

^aCannot determine with partial tag number supplied

^bReported by the same angler

Catch data — Anglers reported releasing 89 green sturgeon, while keeping 1,652 white sturgeon and releasing 3,396 white sturgeon (Table 2). Thirty-two (32) sturgeon were not identified to species.

4 We contacted (by phone) the 3 anglers who reported catching tagged fish HH1001, but have not yet been able to confirm the accuracy of their accounts and we believe the accounts are inaccurate.

Table 2. White sturgeon and green sturgeon catch reported on 2011 Cards

		White Sturgeon	Green Sturgeon	Unidentified Sturgeon	Overall Total
Retained	Measured	1,645	-	-	1,645
	Not Measured	7	-	-	7
	Total	1,652	-	-	1,652
Released	Measured	895	27	2	924
	Not Measured	2,501	62	30	2,593
	Total	3,396	89	32	3,517
Overall Total		5,048	89	32	5,169

One thousand two hundred thirty-four (1,234) anglers reported retaining white sturgeon (Table 3; average of 1.3 sturgeon). Seventy-one (71) anglers retained the limit of three white sturgeon.

One thousand forty-four (1,044) anglers reported releasing white sturgeon (Table 3). Of these anglers, 71 each released 10-60 fish, and one angler released 79 fish.

Sixty-six (66) anglers reported releasing green sturgeon (Table 3; average of 1.3 sturgeon). Of these anglers, 14 each released 2-5 fish, and one angler reported releasing five fish.

Table 3. Summary statistics for per-angler catch from 2011 Cards with catch data

	Number of Anglers	Number of Sturgeon	Maximum Number of Sturgeon per Angler	Average Number of Sturgeon per Angler
Retained White Sturgeon	1,234	1,652	3	1.3
Released White Sturgeon	1,044	3,396	79	3.3
Green Sturgeon	66	89	5	1.3
Unidentified Sturgeon	25	32	4	1.3

Of the 1,817 anglers who caught white sturgeon, 228⁵ anglers retained and released white sturgeon on the same day (average = 1.6 anglers/day, maximum = 5 anglers/day). Of those 228 anglers, one released nine on the same day. Because the length of sturgeon released was not a required field on the Card, the number of white sturgeon voluntarily conserved could not be calculated.

Length data — Green sturgeon total length ranged 13.0-71.0 inches and averaged 31.3 inches (Figure 1). Retained white sturgeon total length ranged 40.0-66.0 inches (see Notes 1 and 2 below) and averaged 55.0 inches (Figure 2). Released white sturgeon total length⁶ ranged 12.0-96.0 inches and averaged 42.9 inches (Figure 3).

Lengths of retained white sturgeon were skewed slightly to the lower end of the slot limit (46-66 inches total length; Figure 2). Of the released white sturgeon for which a length measurement was reported, 174 were within the slot limit (Figure 3), the majority was below the slot limit (N = 600) and 121 were above the slot limit.

⁵ Four individual anglers retained and released white sturgeon on three separate days, 25 individual anglers retained and released white sturgeon on two separate days, and 166 individual anglers retained and released white sturgeon on one day.

⁶ Length of released fish is not a required field, but many anglers volunteered the information.

Note 1: We spoke directly to angler who recorded keeping the 40-inch white sturgeon. The angler said it was a 'keeper', kept the fish, and (although '40' is clearly written on the Card) must have recorded length incorrectly.

Note 2: Length not recorded for seven retained white sturgeon

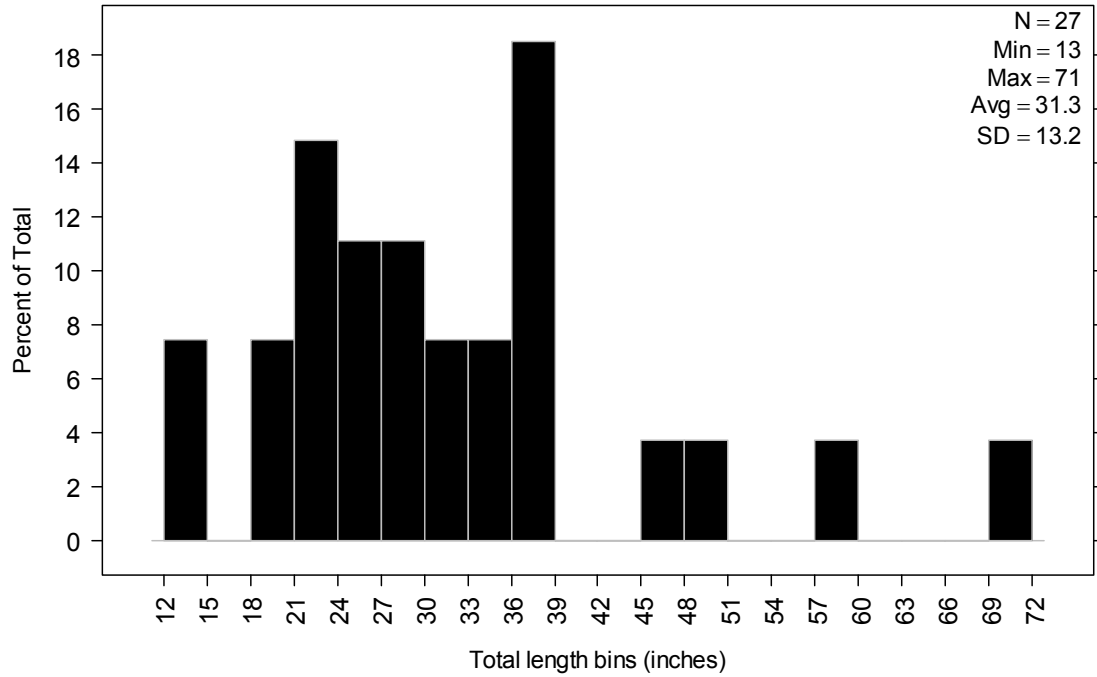


Figure 1. Length frequency distribution of green sturgeon reported on 2011 Cards

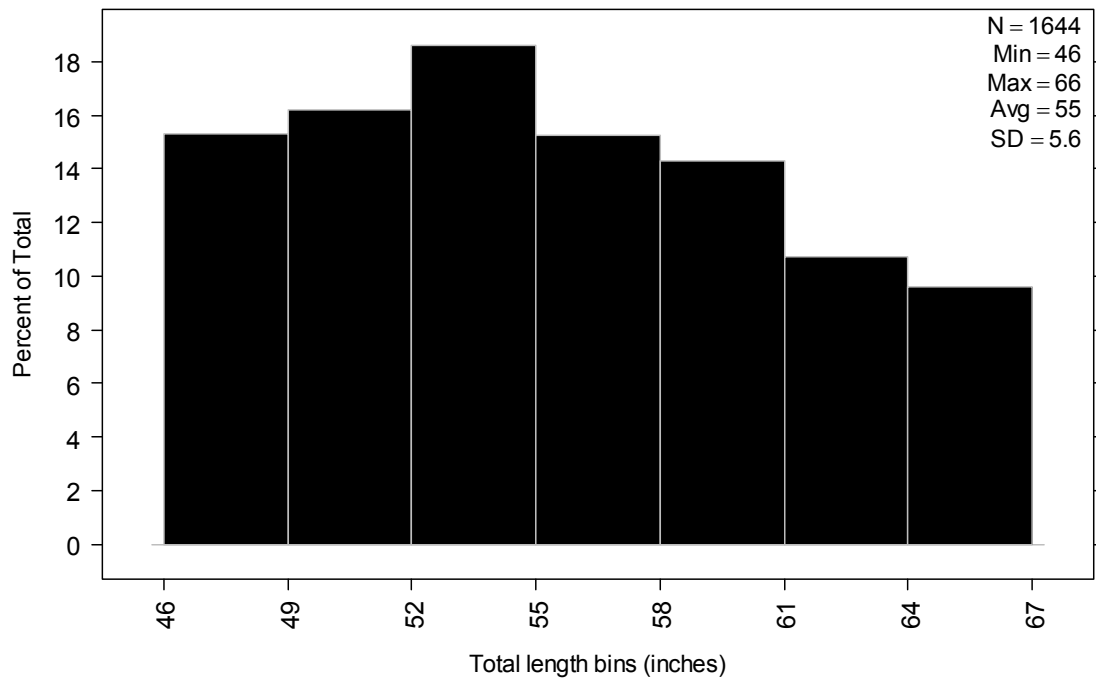


Figure 2. Length frequency distribution of white sturgeon retained as reported on 2011 Cards; figure does not included a 40-inch fish reported as retained by angler

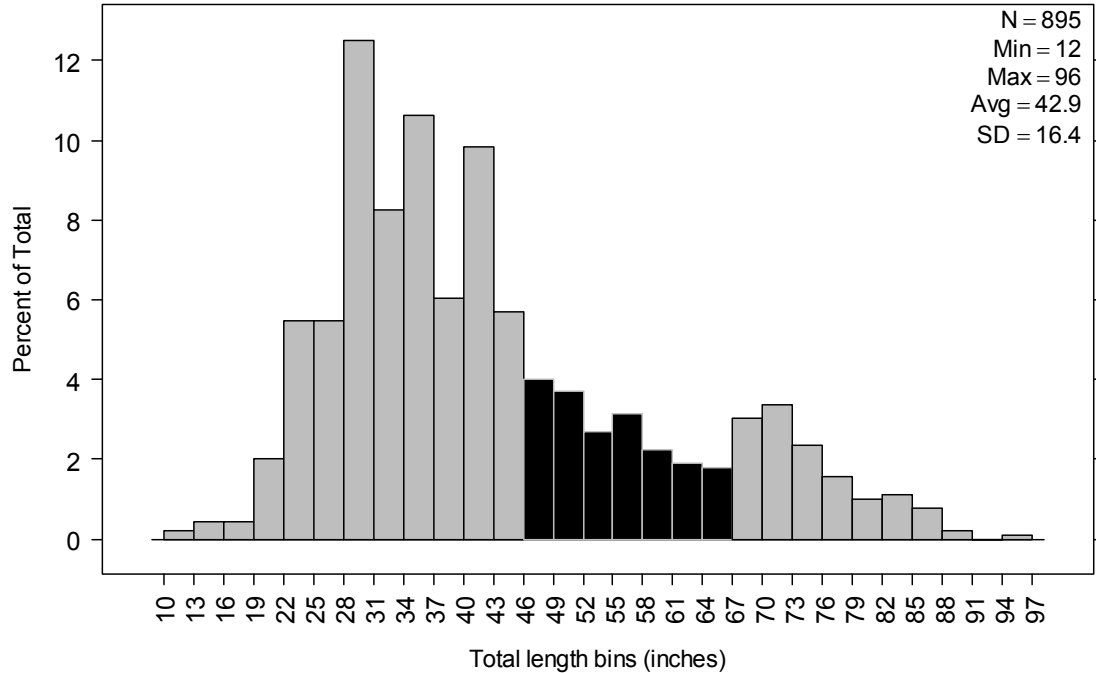


Figure 3. Length frequency distribution of white sturgeon released as reported on 2011 Cards (dark bars denote slot limit of 46–66 inches TL)

Seasonality — Catch per month ranged from approximately 10-16% of the total sturgeon catch (N = 5,169) for each of the following months: January; February; March; April; November; and December (Table 4). For all other months, catch was ≤ 8.0% of total.

Table 4. Green sturgeon and white sturgeon catch per month for 2011

Month	White Sturgeon	Green Sturgeon	Unknown Sturgeon	Catch Total	Percent of Total
<i>Not given</i>	23	-	1	24	0.5%
January	629	7	3	639	12.4%
February	678	7	6	691	13.4%
March	590	14	1	605	11.7%
April	594	8	4	606	11.7%
May	404	11	-	415	8.0%
June	367	10	3	380	7.4%
July	179	8	1	188	3.6%
August	88	2	1	91	1.8%
September	124	4	-	128	2.5%
October	281	5	-	286	5.5%
November	562	9	3	574	11.1%
December	529	4	9	542	10.5%
Totals	5,048	89	32	5,169	

Location data — Sturgeon were collected from 26⁷ of the 28 locations listed on the Card (Figure 4; see note below). For the present purposes, locations where 1-50 sturgeon were collected were grouped as 'All Other Locations' (N = 15). Location codes were either not specified or were illegible (grouped as 'Unknown') for 21 retained white sturgeon, 32 released white sturgeon, one green sturgeon, and one unidentified sturgeon.

Note: Five entries were made for Location 1 (currently not offered as a location choice on the Card), and one entry was made for Location 1B. Of the five anglers reporting Location 1, one angler fished Location 3; the others only reported fishing Location 1. The angler reported having fished Location 1B also fished in Locations 3 and 4, and by the looks of the cross-out on the Card, may have intended to write '3' instead of '1B'. For summary purposes, we considered all locations reported as '1' as 'unknown'.

Catch of green sturgeon was greatest in San Pablo and Suisun bays (Table 5). Catch of white sturgeon was greatest in Suisun Bay and in the Sacramento River from Rio Vista to Chipps Island (Tables 6 and 7). Sixty-nine (69) percent of anglers who reported catching white sturgeon (N = 1,256), caught 1-2 fish each (Figure 5).

⁷ Absent were locations '24' – Pacific Ocean (Point Sur to San Diego) and '26' – Klamath River

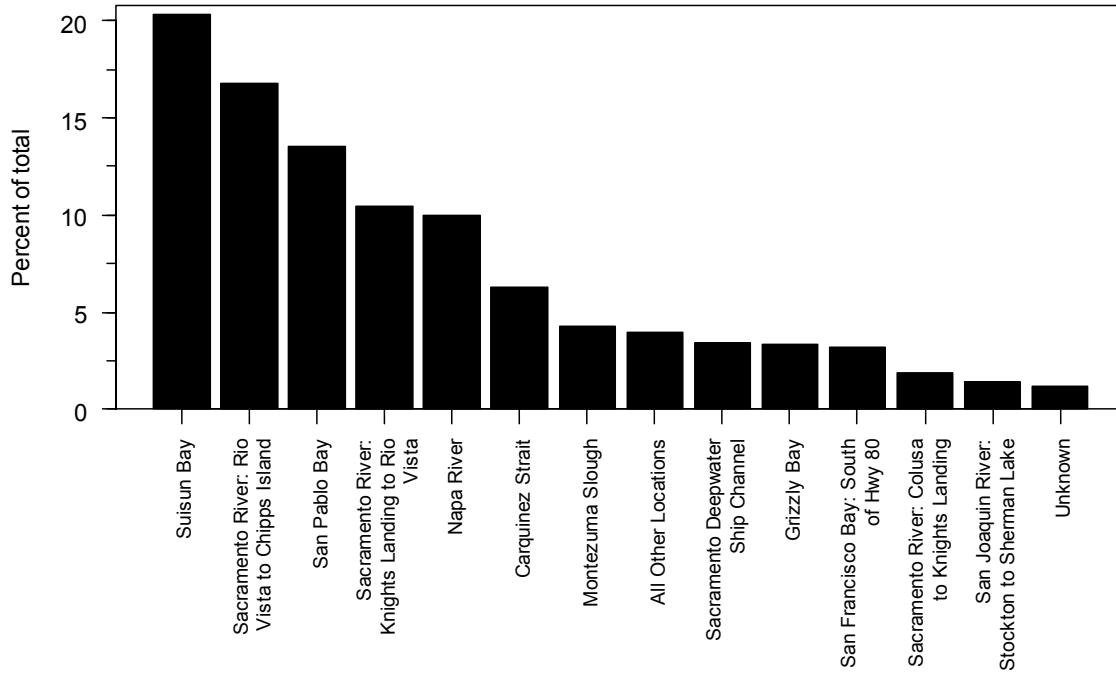


Figure 4. Percent of total catch of all sturgeon by location as reported on 2011 Cards

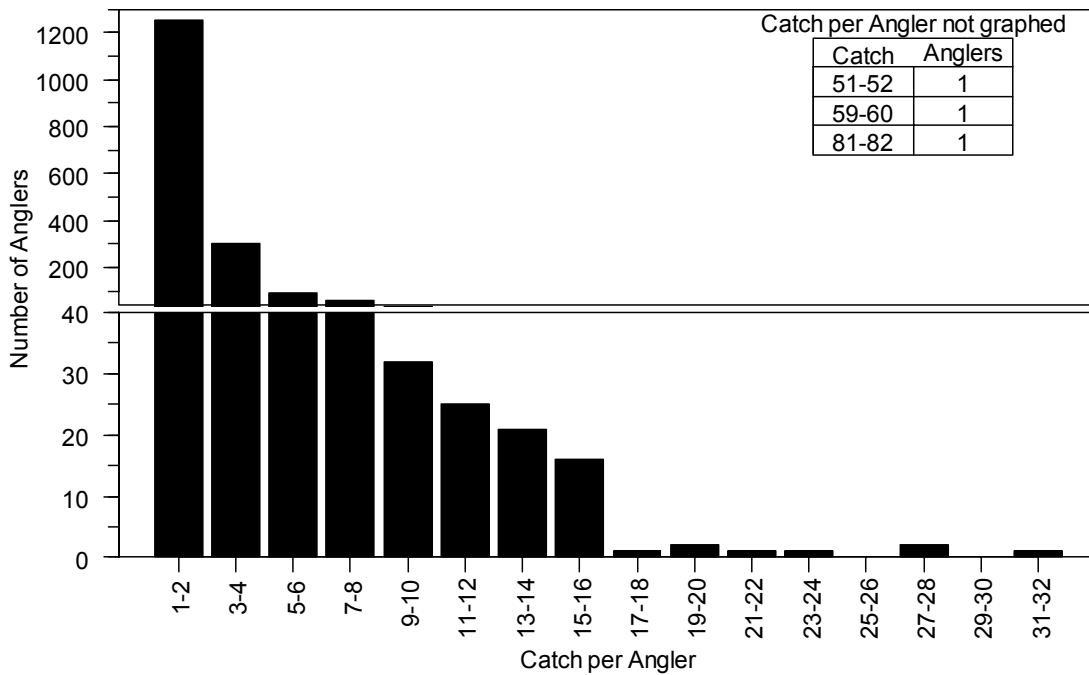


Figure 5. Frequency distribution of white sturgeon catch per angler as reported on 2011 Cards; catch per angler > 32 presented as table in upper-right corner of plot; y-axis break at 40 for ease of display

Table 5. Green sturgeon catch and length statistics by location and season as provided on 2011 Cards. The five locations where total catch was highest were ranked. Seasons were defined as follows: Winter=December-February, Spring= March-May, Summer=June-August, Fall=September-November.

Location Code	Location Name	Rank of Catch	Number of Anglers	No Date of Capture	Winter Catch	Spring Catch	Summer Catch	Fall Catch	Total Catch	Number Measured	Minimum Length (inches)	Maximum Length (inches)	Average Length (inches)
Unknown	Unknown		1	-	-	-	-	1	1	1	20	20	20.0
1A	Sacramento River: Upstream of Red Bluff		-	-	-	-	-	-	-	-			
1B	Sacramento River: Red Bluff to Hwy 32 Bridge		-	-	-	-	-	-	-	-			
1C	Sacramento River: Hwy 32 Bridge to Colusa		-	-	-	-	-	-	-	-			
2	Sacramento River: Colusa to Knights Landing		4	-	-	4	-	-	4	-			
3	Sacramento River: Knights Landing to Rio Vista	4	6	-	4	2	-	1	7	3	14	71	34.3
4	Sacramento River: Rio Vista to Chipps Island	5	6	-	2	1	2	1	6	2	28	29	28.5
5	Feather River		1	-	-	1	-	-	1	-			
6	American River		-	-	-	-	-	-	-	-			
7	Sacramento Deepwater Ship Channel		1	-	-	-	-	1	1	1	21	21	21.0
8	Yolo Bypass		-	-	-	-	-	-	-	-			
9	Montezuma Slough		2	-	2	-	-	-	2	2	22	24	23.0
10	Napa River		3	-	-	4	-	-	4	-			
11	Petaluma River		-	-	-	-	-	-	-	-			
12	San Joaquin River: Upstream of Hwy 140 Bridge		-	-	-	-	-	-	-	-			
13	San Joaquin River: Hwy 140 Bridge to Stockton		-	-	-	-	-	-	-	-			
14	San Joaquin River: Stockton to Sherman Lake		4	-	-	1	1	2	4	-			
15	Old River		-	-	-	-	-	-	-	-			
16	San Pablo Bay	1	19	-	6	9	11	2	28	11	21	59	37.5
17	Carquinez Strait	3	6	-	1	3	2	2	8	1	30	30	30.0
18	Suisun Bay	2	15	-	2	8	4	6	20	4	13	27	21.8
19	Grizzly Bay		2	-	1	-	-	2	3	2	33	36	34.5
20	San Francisco Bay: North of Hwy 80		-	-	-	-	-	-	-	-			
21	San Francisco Bay: South of Hwy 80		-	-	-	-	-	-	-	-			
22	Pacific Ocean: North of Golden Gate Bridge		-	-	-	-	-	-	-	-			
23	Pacific Ocean: Golden Gate Bridge to Point Sur		-	-	-	-	-	-	-	-			
24	Pacific Ocean: Point Sur to San Diego		-	-	-	-	-	-	-	-			
25	Any reservoir or lake		-	-	-	-	-	-	-	-			
26	Klamath River		-	-	-	-	-	-	-	-			
Totals			70*	-	18	33	20	18	89	27			

* = 4 anglers fished and caught a green sturgeon at 2 different locations, 62 anglers fished and caught a green sturgeon at 1 location

Table 6. Retained white sturgeon catch and length statistics by location and season as provided on 2011 Cards. The five locations where total catch was highest were ranked. Seasons were defined as follows: Winter=December-February, Spring= March-May, Summer=June-August, Fall=September-November.

Location Code	Location Name	Rank of Catch	Number of Anglers	No Date of Capture	Winter Catch	Spring Catch	Summer Catch	Fall Catch	Total Catch	Number Measured	Minimum Length (inches)	Maximum Length (inches)	Average Length (inches)
Unknown	Unknown		21	-	12	6	1	5	24	22	46	66	57.8
1A	Sacramento River: Upstream of Red Bluff		5	-	2	2	-	1	5	5	46	60	52.8
1B	Sacramento River: Red Bluff to Hwy 32 Bridge		1	-	1	-	-	-	1	1	49	49	49.0
1C	Sacramento River: Hwy 32 Bridge to Colusa		12	-	3	6	1	2	12	12	51	62	55.9
2	Sacramento River: Colusa to Knights Landing		46	-	17	35	-	1	53	51	46	66	56.6
3	Sacramento River: Knights Landing to Rio Vista	2	188	1	125	89	2	40	257	257	46	66	56.8
4	Sacramento River: Rio Vista to Chipps Island	1	224	-	85	75	12	123	295	293	46	66	55.2
5	Feather River		7	-	-	9	-	-	9	9	47	65	58.3
6	American River		3	-	1	1	-	1	3	3	48	58	53.0
7	Sacramento Deepwater Ship Channel		45	2	27	12	1	13	55	55	46	66	55.2
8	Yolo Bypass		23	-	11	10	-	5	26	26	47	65	57.4
9	Montezuma Slough		41	-	12	17	8	9	46	46	46	66	54.6
10	Napa River		70	-	21	38	22	2	83	83	40	66	54.1
11	Petaluma River		8	-	1	9	1	1	12	12	46	61	53.9
12	San Joaquin River: Upstream of Hwy 140 Bridge		4	-	1	2	-	1	4	4	52	58	54.2
13	San Joaquin River: Hwy 140 Bridge to Stockton		1	-	1	-	-	-	1	1	62	62	62.0
14	San Joaquin River: Stockton to Sherman Lake		19	-	9	4	1	9	23	23	47	63	53.4
15	Old River		1	-	-	-	1	1	2	2	60	61	60.5
16	San Pablo Bay	4	193	1	91	103	42	8	245	245	46	66	53.6
17	Carquinez Strait	5	91	1	10	50	32	16	109	109	46	66	54.9
18	Suisun Bay	3	200	-	90	66	30	61	247	246	46	66	54.3
19	Grizzly Bay		36	-	12	13	5	10	40	40	47	66	53.6
20	San Francisco Bay: North of Hwy 80		10	-	11	1	-	2	14	14	50	61	55.5
21	San Francisco Bay: South of Hwy 80		64	-	60	9	3	13	85	85	46	66	54.6
22	Pacific Ocean: North of Golden Gate Bridge		1	-	1	-	-	-	1	1	55	55	55.0
23	Pacific Ocean: Golden Gate Bridge to Point Sur		-	-	-	-	-	-	-	-	-	-	-
24	Pacific Ocean: Point Sur to San Diego		-	-	-	-	-	-	-	-	-	-	-
25	Any reservoir or lake		-	-	-	-	-	-	-	-	-	-	-
26	Klamath River		-	-	-	-	-	-	-	-	-	-	-
Totals			1,314*	5	604	557	162	324	1,652	1,645			

* = 2 anglers caught and retained fish at 3 different locations, 76 anglers caught and retained fish at 2 different locations, and 1,156 anglers caught and retained fish at 1 location
 Location recorded as "1" (N=1, winter; N=2, spring) included in location Unknown; Location 10 includes fish reported kept at 40 inches

Table 7. Released white sturgeon catch and length statistics by location and season as provided on 2011 Cards. The five locations where total catch was highest were ranked. Seasons were defined as follows: Winter=December-February, Spring= March-May, Summer=June-August, Fall=September-November

Location Code	Location Name	Rank of Catch	Number of Anglers	No Date of Capture	Winter Catch	Spring Catch	Summer Catch	Fall Catch	Total Catch	Number Measured	Minimum Length (inches)	Maximum Length (inches)	Average Length (inches)
Unknown	Unknown		18	-	12	6	1	14	33	6	40	57	48.7
1A	Sacramento River: Upstream of Red Bluff		1	-	1	-	-	-	1	1	75	75	75.0
1B	Sacramento River: Red Bluff to Hwy 32 Bridge		-	-	-	-	-	-	-	-	-	-	-
1C	Sacramento River: Hwy 32 Bridge to Colusa		5	-	7	5	-	-	12	3	46	78	63.3
2	Sacramento River: Colusa to Knights Landing		18	-	11	25	3	-	39	2	76	81	78.5
3	Sacramento River: Knights Landing to Rio Vista	5	119	-	146	61	6	61	274	50	18	84	48.6
4	Sacramento River: Rio Vista to Chipps Island	2	216	2	208	118	32	199	559	88	15	80	43.7
5	Feather River		5	-	3	9	-	-	12	-	-	-	-
6	American River		-	-	-	-	-	-	-	-	-	-	-
7	Sacramento Deepwater Ship Channel		53	-	63	21	2	35	121	28	25	76	42.2
8	Yolo Bypass		14	-	9	13	-	2	24	12	32	86	56.3
9	Montezuma Slough		70	-	48	63	34	27	172	59	20	86	46.8
10	Napa River	3	108	-	73	189	149	17	428	199	12	88	40.5
11	Petaluma River		20	-	11	17	-	3	31	10	24	81	44.6
12	San Joaquin River: Upstream of Hwy 140 Bridge		3	-	2	-	3	-	5	-	-	-	-
13	San Joaquin River: Hwy 140 Bridge to Stockton		1	-	-	-	-	1	1	-	-	-	-
14	San Joaquin River: Stockton to Sherman Lake		18	-	11	18	7	7	43	6	22	74	40.7
15	Old River		1	-	4	-	1	1	6	-	-	-	-
16	San Pablo Bay	4	161	-	165	158	76	21	420	82	24	87	44.1
17	Carquinez Strait		95	6	39	82	43	38	208	34	24	72	39.0
18	Suisun Bay	1	236	9	313	181	95	181	779	233	12	86	37.9
19	Grizzly Bay		56	-	47	47	13	20	127	29	20	96	45.4
20	San Francisco Bay: North of Hwy 80		8	-	16	1	-	1	18	2	67	77	72.0
21	San Francisco Bay: South of Hwy 80		44	1	43	16	7	15	82	51	20	85	54.8
22	Pacific Ocean: North of Golden Gate Bridge		-	-	-	-	-	-	-	-	-	-	-
23	Pacific Ocean: Golden Gate Bridge to Point Sur		1	-	-	1	-	-	1	-	-	-	-
24	Pacific Ocean: Point Sur to San Diego		-	-	-	-	-	-	-	-	-	-	-
25	Any reservoir or lake		-	-	-	-	-	-	-	-	-	-	-
26	Klamath River		-	-	-	-	-	-	-	-	-	-	-
Totals			1,271*	18	1,232	1,031	472	643	3,396	895			

* = 3 anglers caught and released fish at 6 different locations, 2 anglers caught and released fish at 5 different locations, 7 anglers caught and released fish at 4 different locations, 22 anglers caught and released fish at 3 different locations, 139 anglers caught and released fish at 2 different locations, and 871 anglers caught and released fish at 1 location
 Location recorded as "1" (N=1, spring) included in location Unknown

Discussion

The 2011 Sturgeon Fishing Report Cards provided pertinent information for relatively little cost. We recommend continuing use of Sturgeon Fishing Report Cards.

Highlights of information from 2011 Cards include the following:

- (1) Nine white sturgeon were reported to have been caught in Location 12 (San Joaquin River, upstream of Highway 140 Bridge) by 6 anglers. Because occurrence of sturgeon in this reach of the San Joaquin River is rare, we contacted each of the 6⁸ anglers to confirm their reporting. We could not make contact with 5 of the 6 (i.e., did not return our call; number no longer in service). One of the 6 confirmed catching the fish in Location 12.
- (2) The fraction of unidentified sturgeon (0.6%) was about half of last year's record high of 1.3%.
- (3) Recapture data (32 disk-tagged fish caught and reported) will be used to augment mark-recapture data used by the Department's sturgeon population study, and thus are important for the precision and perhaps accuracy of estimates of abundance, harvest rate, and survival rate.
- (4) Approximately twice as many 2011 Cards were issued than had been issued in any previous year, which is likely attributable to use of the ALDS system.
- (5) More than half the anglers who fished for sturgeon were not successful and successful anglers retained on average less than half the annual bag limit of three white sturgeon.

Bibliography

DuBois J, Gingras M, Aasen, G. 2011. Status and Trends of San Francisco Estuary White Sturgeon. Interagency Ecological Program for the San Francisco Estuary Newsletter 24(1).

DuBois J, Gingras M. 2011. Using Harvest Rate and Harvest to Estimate White Sturgeon Abundance. Interagency Ecological Program for the San Francisco Estuary Newsletter 24(3).

For more literature click on [additional bibliography](#).

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⁸ Was actually 11 anglers, but we confirmed — based on their description to us of where each was fishing — 5 of them had reported the incorrect location

