

2008 Sturgeon Fishing Report Card: Preliminary Data Report

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Summary

A Sturgeon Fishing Report Card (Card; Appendix 1) is part of a suite of sport fishing regulations intended to protect California's white sturgeon fishery while increasing protections for the federally-threatened green sturgeon and adding resiliency to the white sturgeon population. This report summarizes data from Cards for 2008.

The 2008 Card was printed using Bay-Delta Sport Fishing Enhancement Stamp funds and then issued to any angler at no charge. Card data were managed using Sport Fish Restoration Act and Interagency Ecological Program funds.

One hundred eighty thousand (180,000) Cards were printed at a cost of \$31,536 before taxes. Approximately 57,000 Cards were issued, 4,843 were returned to the Department, and 1,993 had data on sturgeon catch.

Anglers released 240 green sturgeon, retained 1,735 white sturgeon, and released 5,031 white sturgeon. Catch of green sturgeon was greatest in the Sacramento River from Red Bluff to Colusa and the Sacramento River from Rio Vista to Chipps Island. Catch of white sturgeon was greatest in the Sacramento River from Knights Landing to Rio Vista and the Sacramento River from Rio Vista to Chipps Island.

Introduction

This report summarizes data from the 2008 California Sturgeon Fishing Report Card (Card). The Card became part of a suite of sport fishing regulations in March 2007 that are 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 2008 Card was distributed to any angler at no charge and was required of every angler — including minors, anglers fishing only from piers, and anglers fishing on "free fishing" days — who fished for and retained or released a sturgeon in California.

Cards were printed using Bay-Delta Sport Fishing Enhancement Stamp funds. Sport Fish Restoration Act and Interagency Ecological Program funds were used to manage Card data and prepare this report.

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 also included detachable single-use serially-numbered Card-specific tags to be placed on fish retained by anglers.

Information from 2008 Cards on catch of sturgeon is complementary to on-going research conducted by the Department and others and will be used in planned articles and technical reports. Future year-specific California Sturgeon Fishing Report Card data reports will include a bibliography of documents that used Card data.

Card Distribution and Return

One hundred eighty thousand (180,000) Cards were printed at a cost of \$31,536 before taxes then distributed beginning in late 2007 to Department offices and licensed sales agents using the License and Revenue Branch “steelhead card distribution list”. Approximately 57,000 Cards were issued to anglers.

Anglers began returning Cards almost immediately after distribution and most were returned by April 2009. The few Cards returned during preparation of this report are not described here. Four thousand eight hundred forty-three (4,843) Cards were returned and 1,993 of those had data on sturgeon catch.

Angler Data

The Card included fields for general, personal, and contact information, as well as for catch data (Appendix 1). Contact information included California fishing license number, street address, phone, and e-mail.

Personal contact information and driver’s license number were not entered into the database. Two hundred sixteen anglers supplied no California fishing license number, or submitted illegible or non-standard license numbers. Six anglers were specifically described as “juniors” or under the age of 16.

Catch Data

The Card contained two sections for reporting sturgeon catch: (1) Sturgeon Retained and (2) Sturgeon Released. Both sections included fields to report month, day, and location. The “Sturgeon Retained” section also contained a field for reporting length and reminded anglers that only white sturgeon may be retained. The “Sturgeon Released” section also contained check boxes for species identification (green or white). Length was not required or requested for this section, but some anglers provided it.

Catch data — Anglers reported releasing 240 green sturgeon, while keeping 1,735 white sturgeon and releasing 5,031 white sturgeon (Table 1). Three sturgeon were not identified to species.

Table 1. White sturgeon and green sturgeon catch reported on 2008 Cards

| | | White Sturgeon | Green Sturgeon | Unidentified Sturgeon | Overall Total |
|----------------------|--------------|----------------|----------------|-----------------------|---------------|
| Retained | Measured | 1,726 | 0 | 0 | 1,726 |
| | Not Measured | 9 | 0 | 0 | 9 |
| | Total | 1,735 | 0 | 0 | 1,735 |
| Released | Measured | 688 | 19 | 0 | 707 |
| | Not Measured | 4,343 | 221 | 3 | 4,567 |
| | Total | 5,031 | 240 | 3 | 5,274 |
| Overall Total | | 6,766 | 240 | 3 | 7,009 |

One thousand two hundred ninety-nine (1,299) anglers reported retaining white sturgeon (Table 2). Those anglers retained an average of 1.3 white sturgeon and 89 anglers retained the limit of three. Of the 1,962 anglers who caught white sturgeon, 346¹ anglers retained and released white sturgeon on the same day. Of those 346 anglers, none retained more than one per day and one

¹ Sixteen anglers retained and released white sturgeon on three separate days, 37 anglers retained and released white sturgeon on two separate days, and 224 anglers retained and released white sturgeon on one day.

angler released seven in 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.

Of the 1,262 anglers who reported catching and releasing white sturgeon, 118 released ≥ 10 fish each and four anglers reporting releasing 36 fish (Table 2).

One hundred fifty-one (151) anglers reported catching and releasing green sturgeon. These anglers released an average of 1.6 green sturgeon, one angler reported releasing 31² green sturgeon (Table 2), and three anglers reported catching and releasing 11, 13, and 14 green sturgeon.

Table 2. Summary statistics for per-angler catch from 2008 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 | 1,299 | 1,735 | 3 | 1.3 |
| Released White Sturgeon | 1,262 | 5,031 | 36 | 4.0 |
| Green Sturgeon | 151 | 240 | 31 | 1.6 |
| Unidentified Sturgeon | 2 | 3 | 2 | 1.5 |

Length data — Green sturgeon total length ranged from 12.0 – 68.0 inches and averaged 31.6 inches (Figure 1). Retained white sturgeon total length ranged from 46.0 – 108.0 inches and averaged 55.4 inches (Figure 2). Released white sturgeon total length ranged from 12.0 – 96.0 inches and averaged 43.1 inches (Figure 3).

Note: Length was not recorded for four retained white sturgeon. Five lengths recorded for retained white sturgeon were not legible and could not be entered into the database.

Lengths of retained white sturgeon were fairly evenly distributed throughout the 46 – 66 inch total length slot limit. Five anglers each reported retaining one white sturgeon that was over the upper end of the legal-slot limit (Figure 2).

Note: All five lengths were legible and confirmed as accurate entries in the database; two of the five anglers did not affix a tag to the sturgeon; and two of the five anglers released on the same day one sturgeon in addition to the one oversized retained.

Of the released white sturgeon for which a length measurement was reported, 201 were within slot limit. The majority was below the lower end of the slot limit (N = 392) (Figure 3).

² Angler confirmed catch when we contacted him.

Figure 1. Total lengths of green sturgeon as reported on 2008 Cards

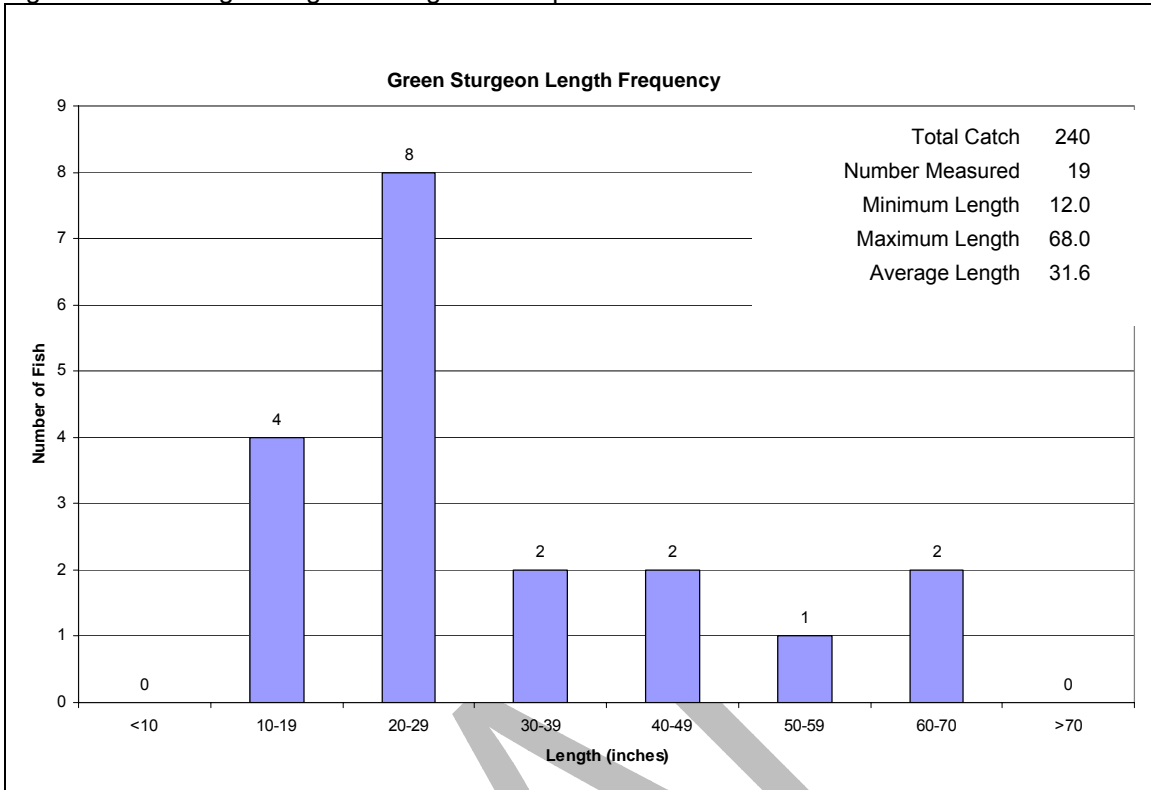


Figure 2. Total lengths of white sturgeon retained as reported on 2008 Cards

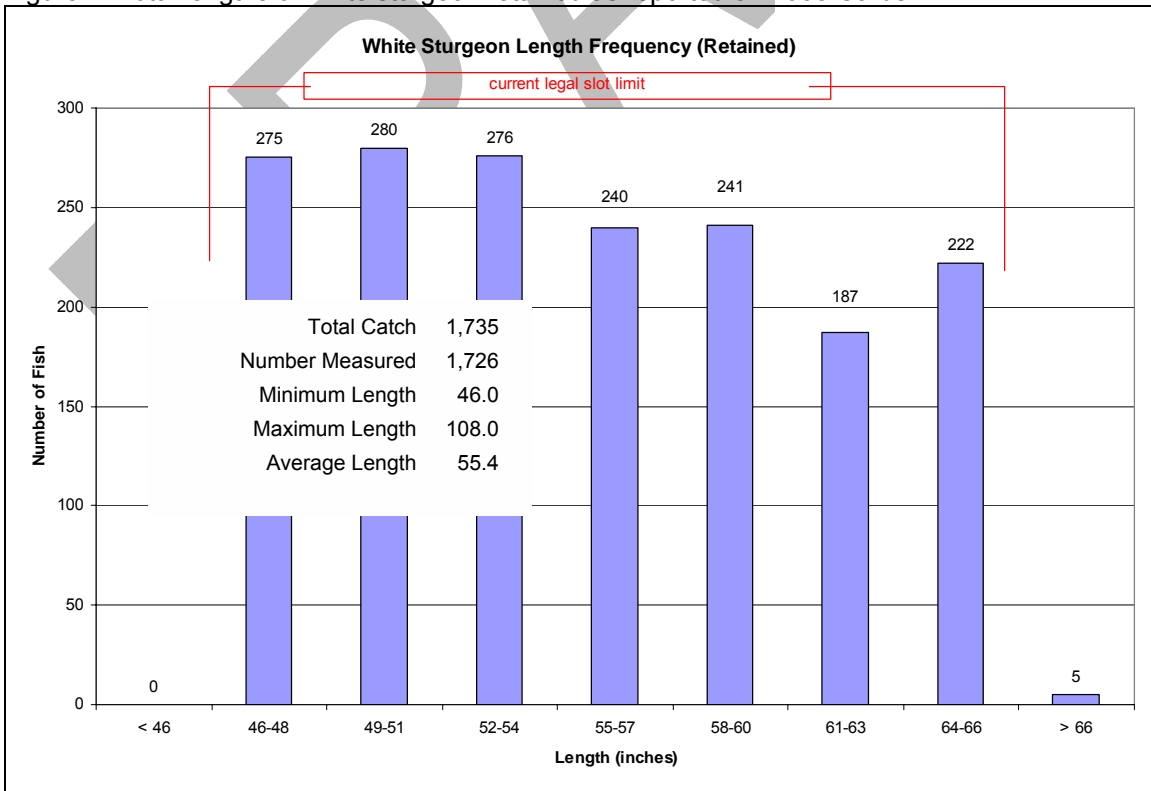
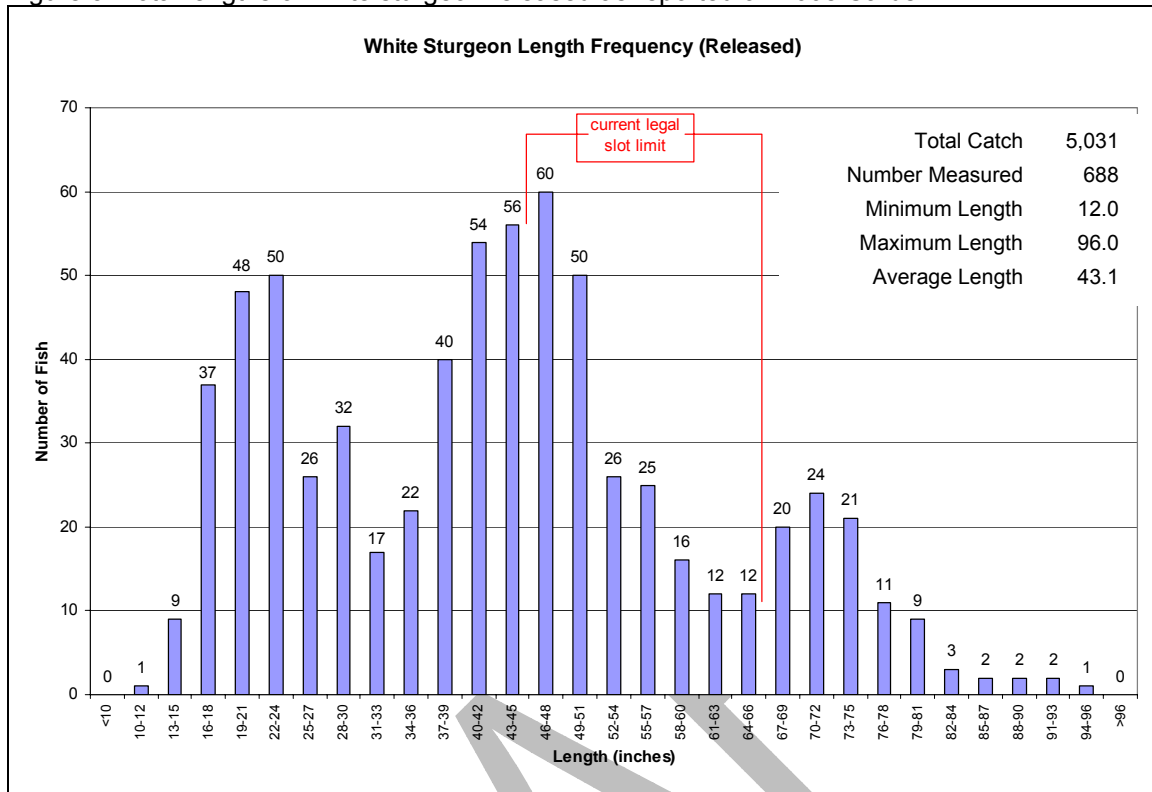


Figure 3. Total lengths of white sturgeon released as reported on 2008 Cards



Seasonality — Catch of green sturgeon and white sturgeon was greatest during the winter and spring (Table 3). Catch per month was between approximately 10 and 15% of the total sturgeon catch (N = 7,009) for each of the following months: January; February; March; April; November; and December (Table 3). Catch for all other months each was ≤ 7% of the total catch.

Table 3. Green and white sturgeon catch per month and per season (Winter=December-February, Spring= March-May, Summer=June-August, Fall=September-November)

| Month | White Sturgeon | Green Sturgeon | Unknown Sturgeon | Catch Total | Percent of Total |
|---------------|----------------|----------------|------------------|--------------|------------------|
| January | 646 | 19 | 0 | 665 | 9.5% |
| February | 994 | 24 | 0 | 1,018 | 14.5% |
| March | 1,056 | 24 | 0 | 1,080 | 15.4% |
| April | 736 | 22 | 0 | 758 | 10.8% |
| May | 482 | 10 | 0 | 492 | 7.0% |
| June | 253 | 13 | 2 | 268 | 3.8% |
| July | 113 | 13 | 0 | 126 | 1.8% |
| August | 117 | 9 | 0 | 126 | 1.8% |
| September | 147 | 7 | 0 | 154 | 2.2% |
| October | 435 | 16 | 1 | 452 | 6.4% |
| November | 889 | 32 | 0 | 921 | 13.1% |
| December | 898 | 51 | 0 | 949 | 13.5% |
| Totals | 6,766 | 240 | 3 | 7,009 | |

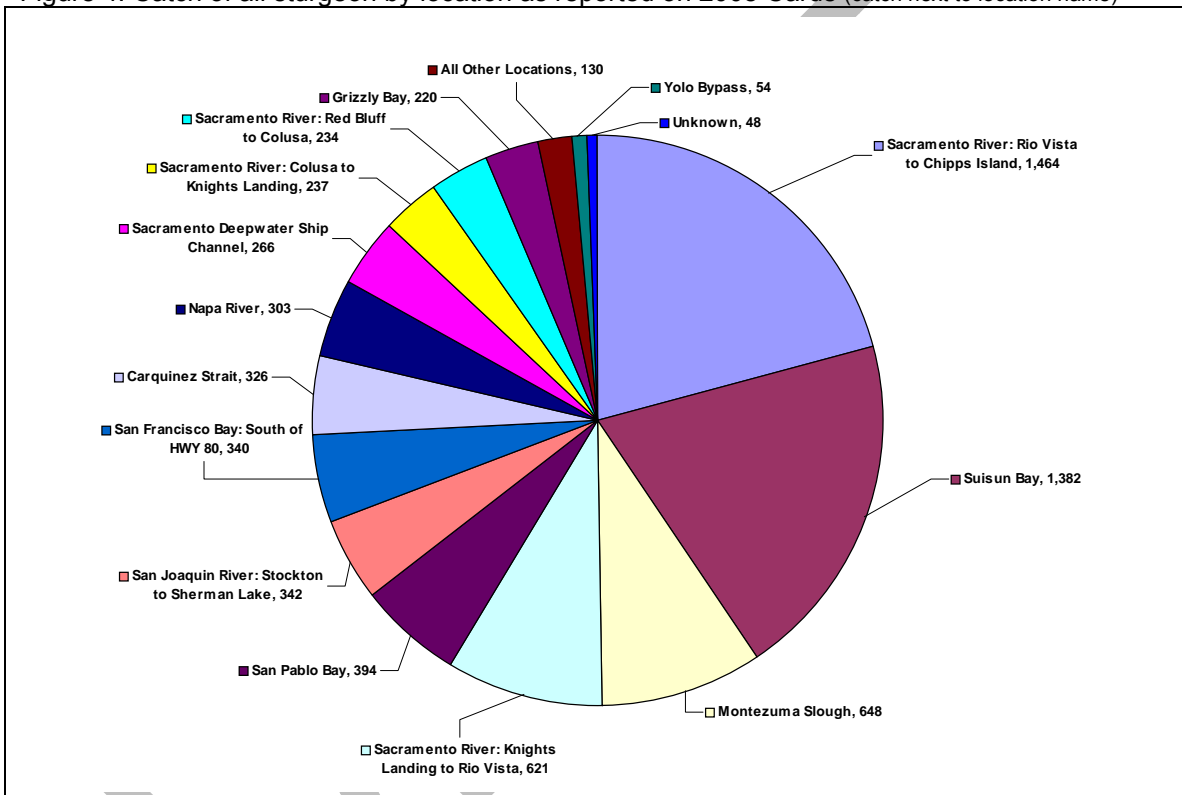
| Season | White Sturgeon | Green Sturgeon | Unknown Sturgeon | Catch Total | Percent of Total |
|---------------|----------------|----------------|------------------|--------------|------------------|
| Winter | 2,538 | 94 | 0 | 2,632 | 37.6% |
| Spring | 2,274 | 56 | 0 | 2,330 | 33.2% |
| Summer | 483 | 35 | 2 | 520 | 7.4% |
| Fall | 1,471 | 55 | 1 | 1,527 | 21.8% |
| Totals | 6,766 | 240 | 3 | 7,009 | |

Location data — Sturgeon were collected from all 25 locations listed on the Card (Figure 4). Locations where less than 40 sturgeon were collected were grouped as “All Other Locations” (N = 11; Figure 4). Location codes were either not specified or were illegible (grouped as “Unknown”; Figure 4) for 25 retained white sturgeon, 21 released white sturgeon, and 2 green sturgeon.

Nearly 21% (N = 1,464) of all sturgeon collected were in the Sacramento River from Rio Vista to Chipps Island (location code = 4) (Figure 4) and almost 20% of the catch was from Suisun Bay.

Catch of green sturgeon was greatest in the Sacramento River from Red Bluff to Colusa and from Rio Vista to Chipps Island (Table 4)³. Catch of white sturgeon was greatest in the Sacramento River from Knights Landing to Rio Vista and from Rio Vista to Chipps Island (Tables 5 and 6).

Figure 4. Catch of all sturgeon by location as reported on 2008 Cards (catch next to location name)



³ One angler reported catching and releasing 31 green sturgeon in this reach of the Sacramento River.

Table 4. Green sturgeon catch and associated length data by location as provided on 2008 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 | Winter Catch | Spring Catch | Summer Catch | Fall Catch | Total Catch | Number Measured | Minimum Length (inches) | Maximum Length (inches) | Average Length (inches) |
|---------------|--|---------------|-------------------|--------------|--------------|--------------|------------|-------------|-----------------|-------------------------|-------------------------|-------------------------|
| | Unknown | | 2 | 0 | 0 | 0 | 2 | 2 | 0 | | | |
| 1 | Sacramento River: Red Bluff to Colusa | 1 | 11 | 20 | 6 | 20 | 9 | 55 | 0 | | | |
| 2 | Sacramento River: Colusa to Knights Landing | | 2 | 0 | 2 | 0 | 0 | 2 | 0 | | | |
| 3 | Sacramento River: Knights Landing to Rio Vista | | 8 | 4 | 3 | 0 | 1 | 8 | 2 | 22.0 | 26.0 | 24.0 |
| 4 | Sacramento River: Rio Vista to Chipps Island | 2 | 39 | 17 | 9 | 2 | 18 | 46 | 7 | 18.5 | 63.0 | 34.1 |
| 5 | Feather River | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 6 | American River | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 7 | Sacramento Deepwater Ship Channel | | 8 | 3 | 3 | 0 | 2 | 8 | 0 | | | |
| 8 | Yolo Bypass | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 9 | Montezuma Slough | 4 | 11 | 7 | 4 | 1 | 0 | 12 | 0 | | | |
| 10 | Napa River | | 6 | 3 | 2 | 0 | 1 | 6 | 1 | 25.0 | 25.0 | 25.0 |
| 11 | Petaluma River | | 1 | 1 | 0 | 0 | 0 | 1 | 0 | | | |
| 12 | San Joaquin River: Upstream of HWY 140 bridge | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 13 | San Joaquin River: HWY 140 bridge to Stockton | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 14 | San Joaquin River: Stockton to Sherman Lake | 3 | 8 | 12 | 9 | 4 | 11 | 36 | 0 | | | |
| 15 | Old River | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 16 | San Pablo Bay | 5 | 10 | 4 | 2 | 1 | 3 | 10 | 1 | 44.0 | 44.0 | 44.0 |
| 17 | Carquinez Strait | | 8 | 5 | 2 | 1 | 1 | 9 | 3 | 15.0 | 47.5 | 26.2 |
| 18 | Suisun Bay | 3 | 29 | 14 | 12 | 5 | 5 | 36 | 4 | 12.0 | 68.0 | 32.3 |
| 19 | Grizzly Bay | | 3 | 0 | 1 | 0 | 2 | 3 | 0 | | | |
| 20 | San Francisco Bay: North of HWY 80 | | 2 | 1 | 0 | 1 | 0 | 2 | 0 | | | |
| 21 | San Francisco Bay: South of HWY 80 | | 4 | 3 | 1 | 0 | 0 | 4 | 1 | 38.0 | 38.0 | 38.0 |
| 22 | Pacific Ocean: North of Golden Gate Bridge | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 23 | Pacific Ocean: Golden Gate Bridge to Point Sur | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 24 | Pacific Ocean: Point Sur to San Diego | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 25 | Any reservoir or lake | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| Totals | | | 152* | 94 | 56 | 35 | 55 | 240 | 19 | | | |

* = One angler fished and caught a green sturgeon at two different locations

Table 5. Retained white sturgeon catch and associated length data by location as provided on 2008 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 | Winter Catch | Spring Catch | Summer Catch | Fall Catch | Total Catch | Number Measured | Minimum Length (inches) | Maximum Length (inches) | Average Length (inches) |
|---------------|--|---------------|-------------------|--------------|--------------|--------------|------------|--------------|-----------------|-------------------------|-------------------------|-------------------------|
| | Unknown | | 22 | 8 | 12 | 1 | 4 | 25 | 25 | 46.0 | 65.0 | 54.9 |
| 1 | Sacramento River: Red Bluff to Colusa | | 44 | 3 | 50 | 2 | 0 | 55 | 55 | 46.5 | 66.0 | 57.2 |
| 2 | Sacramento River: Colusa to Knights Landing | 4 | 97 | 37 | 84 | 0 | 5 | 126 | 126 | 46.0 | 66.0 | 58.9 |
| 3 | Sacramento River: Knights Landing to Rio Vista | 1 | 201 | 93 | 144 | 3 | 32 | 272 | 271 | 46.0 | 66.0 | 56.4 |
| 4 | Sacramento River: Rio Vista to Chipps Island | 1 | 212 | 100 | 84 | 14 | 74 | 272 | 271 | 46.0 | 71.0 | 54.7 |
| 5 | Feather River | | 2 | 1 | 1 | 0 | 0 | 2 | 2 | 51.0 | 60.0 | 55.5 |
| 6 | American River | | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 57.0 | 57.0 | 57.0 |
| 7 | Sacramento Deepwater Ship Channel | | 49 | 28 | 19 | 1 | 14 | 62 | 62 | 46.0 | 65.0 | 54.6 |
| 8 | Yolo Bypass | | 15 | 5 | 12 | 0 | 1 | 18 | 18 | 48.0 | 66.0 | 58.1 |
| 9 | Montezuma Slough | | 72 | 35 | 35 | 2 | 14 | 86 | 86 | 46.0 | 75.0 | 56.1 |
| 10 | Napa River | | 61 | 24 | 31 | 7 | 4 | 66 | 66 | 46.0 | 65.7 | 52.2 |
| 11 | Petaluma River | | 3 | 3 | 1 | 0 | 0 | 4 | 4 | 48.0 | 57.0 | 52.0 |
| 12 | San Joaquin River: Upstream of HWY 140 bridge | | 6 | 4 | 0 | 0 | 2 | 6 | 6 | 47.0 | 62.0 | 53.0 |
| 13 | San Joaquin River: HWY 140 bridge to Stockton | | 8 | 1 | 7 | 0 | 1 | 9 | 9 | 49.0 | 66.0 | 58.1 |
| 14 | San Joaquin River: Stockton to Sherman Lake | | 36 | 20 | 8 | 2 | 17 | 47 | 47 | 46.0 | 65.0 | 53.3 |
| 15 | Old River | | 2 | 0 | 1 | 0 | 1 | 2 | 2 | 46.5 | 62.0 | 54.3 |
| 16 | San Pablo Bay | 5 | 101 | 52 | 54 | 2 | 7 | 115 | 114 | 46.0 | 69.0 | 54.6 |
| 17 | Carquinez Strait | | 60 | 22 | 25 | 9 | 8 | 64 | 64 | 46.0 | 66.0 | 54.4 |
| 18 | Suisun Bay | 2 | 210 | 83 | 97 | 32 | 50 | 262 | 259 | 46.0 | 75.0 | 54.3 |
| 19 | Grizzly Bay | | 41 | 22 | 11 | 3 | 14 | 50 | 50 | 46.0 | 66.0 | 54.3 |
| 20 | San Francisco Bay: North of HWY 80 | | 15 | 12 | 6 | 0 | 2 | 20 | 20 | 47.0 | 65.0 | 56.3 |
| 21 | San Francisco Bay: South of HWY 80 | 3 | 124 | 121 | 19 | 4 | 22 | 166 | 163 | 46.0 | 66.0 | 55.9 |
| 22 | Pacific Ocean: North of Golden Gate Bridge | | 2 | 0 | 1 | 0 | 1 | 2 | 2 | 47.0 | 52.0 | 49.5 |
| 23 | Pacific Ocean: Golden Gate Bridge to Point Sur | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 24 | Pacific Ocean: Point Sur to San Diego | | 1 | 2 | 0 | 0 | 0 | 2 | 2 | 52.0 | 64.0 | 58.0 |
| 25 | Any reservoir or lake | | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 108.0 | 108.0 | 108.0 |
| Totals | | | 1,386* | 677 | 702 | 83 | 273 | 1,735 | 1,726 | | | |

* = 6 anglers caught and retained fish at 3 different locations, 75 anglers caught and retained fish at 2 different locations, and 1,218 anglers caught and retained fish at 1 location

Table 6. Released white sturgeon catch and associated length data by location as provided on 2008 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 | Winter Catch | Spring Catch | Summer Catch | Fall Catch | Total Catch | Number Measured | Minimum Length (inches) | Maximum Length (inches) | Average Length (inches) |
|---------------|--|---------------|-------------------|--------------|--------------|--------------|--------------|--------------|-----------------|-------------------------|-------------------------|-------------------------|
| | Unknown | | 17 | 3 | 11 | 1 | 6 | 21 | 2 | 32.0 | 39.0 | 35.5 |
| 1 | Sacramento River: Red Bluff to Colusa | | 37 | 43 | 73 | 4 | 2 | 122 | 3 | 67.0 | 70.0 | 68.0 |
| 2 | Sacramento River: Colusa to Knights Landing | | 52 | 36 | 61 | 9 | 2 | 108 | 13 | 45.0 | 74.0 | 60.0 |
| 3 | Sacramento River: Knights Landing to Rio Vista | 4 | 146 | 163 | 128 | 7 | 43 | 341 | 37 | 17.0 | 80.0 | 47.5 |
| 4 | Sacramento River: Rio Vista to Chipps Island | 1 | 313 | 410 | 255 | 44 | 437 | 1,146 | 193 | 12.0 | 87.0 | 34.0 |
| 5 | Feather River | | 4 | 7 | 0 | 1 | 1 | 9 | 1 | 14.0 | 14.0 | 14.0 |
| 6 | American River | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 7 | Sacramento Deepwater Ship Channel | | 53 | 78 | 53 | 6 | 59 | 196 | 35 | 14.0 | 76.0 | 32.6 |
| 8 | Yolo Bypass | | 15 | 16 | 17 | 0 | 3 | 36 | 15 | 18.0 | 68.0 | 45.8 |
| 9 | Montezuma Slough | 3 | 157 | 179 | 198 | 83 | 90 | 550 | 109 | 13.0 | 96.0 | 48.7 |
| 10 | Napa River | | 88 | 78 | 113 | 20 | 20 | 231 | 11 | 27.0 | 76.0 | 47.8 |
| 11 | Petaluma River | | 13 | 8 | 9 | 2 | 1 | 20 | 0 | | | |
| 12 | San Joaquin River: Upstream of HWY 140 bridge | | 2 | 2 | 0 | 0 | 0 | 2 | 1 | 72.0 | 72.0 | 72.0 |
| 13 | San Joaquin River: HWY 140 bridge to Stockton | | 9 | 1 | 9 | 1 | 9 | 20 | 5 | 41.0 | 91.0 | 70.2 |
| 14 | San Joaquin River: Stockton to Sherman Lake | | 54 | 89 | 58 | 16 | 96 | 259 | 12 | 16.0 | 48.0 | 34.7 |
| 15 | Old River | | 3 | 1 | 2 | 0 | 0 | 3 | 0 | | | |
| 16 | San Pablo Bay | 5 | 118 | 107 | 141 | 6 | 15 | 269 | 34 | 26.0 | 79.0 | 46.5 |
| 17 | Carquinez Strait | | 91 | 84 | 77 | 41 | 51 | 253 | 29 | 14.0 | 93.0 | 50.4 |
| 18 | Suisun Bay | 2 | 286 | 354 | 299 | 146 | 285 | 1,084 | 129 | 15.0 | 90.0 | 43.7 |
| 19 | Grizzly Bay | | 67 | 68 | 41 | 11 | 47 | 167 | 13 | 20.0 | 78.0 | 50.2 |
| 20 | San Francisco Bay: North of HWY 80 | | 8 | 7 | 5 | 1 | 3 | 16 | 1 | 38.0 | 38.0 | 38.0 |
| 21 | San Francisco Bay: South of HWY 80 | | 72 | 122 | 20 | 1 | 27 | 170 | 45 | 13.0 | 75.0 | 53.4 |
| 22 | Pacific Ocean: North of Golden Gate Bridge | | 1 | 1 | 0 | 0 | 0 | 1 | 0 | | | |
| 23 | Pacific Ocean: Golden Gate Bridge to Point Sur | | 1 | 3 | 0 | 0 | 0 | 3 | 0 | | | |
| 24 | Pacific Ocean: Point Sur to San Diego | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | |
| 25 | Any reservoir or lake | | 2 | 1 | 2 | 0 | 1 | 4 | 0 | | | |
| Totals | | | 1,609* | 1,861 | 1,572 | 400 | 1,198 | 5,031 | 688 | | | |

* = 11 anglers caught and released fish at 5 different locations, 16 anglers caught and released fish at 4 different locations, 32 anglers caught and released fish at 3 different locations, 191 anglers caught and released fish at 2 different locations, and 1,012 anglers caught and released fish at 1 location

Discussion

The 2008 Sturgeon Fishing Report Card provided pertinent information for relatively little cost. Highlights of information from 2008 Cards include the following:

- (1) Thousands of anglers took great care completing the Cards and many volunteered information and/or comments that were both interesting and helpful.
- (2) Most anglers who took the time to submit their Card never caught a sturgeon and an average successful angler retained less than half the annual bag limit of three white sturgeon.
- (3) Card data corroborate anecdotal reports and reports from Enforcement that green sturgeon are a major fraction of reach-specific fisheries in only the Red Bluff-to-Colusa reach of the Sacramento River. Because most of the Central Valley's green sturgeon spawning grounds are in that reach and adult green sturgeon occur there year-round, focused emphasis on green sturgeon conservation is appropriate there.
- (4) Just three strong white sturgeon age-classes appeared susceptible to sport fishing gear.

From the 2008 Card data, it was clear that minor changes to subsequent-year Sturgeon Fishing Report Cards and management of the Program could provide more and better information for little or no cost. These changes include at least the following:

- (1) Fishing effort — a very important aspect of the fishery — could be better estimated by adding a “check box” for whether (or not) the angler fished for sturgeon or by using location information in a fashion similar to that in the Steelhead Fishing Report and Restoration Card.
- (2) Additional outreach via the internet would likely increase the proportion of Cards that are returned and the quality of information on Cards that are returned.

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