

STATUS REPORT - PINNIPED PREDATION AND DETERRENT ACTIVITIES AT BONNEVILLE DAM, 2012

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This is the eighth weekly status report for 2012 and summarizes all pinniped predation monitoring and deterrent activities at Bonneville Dam from January 1 through April 18, 2012 (unless otherwise noted). Regular daylight observations began January 6 and will continue through the end of May, five days per week excluding holidays. Final predation estimates will be expanded for hours and days not observed, adjusted for “unknown” prey species take, and a night time predation factor applies at the end of the observation season and those updated figures will be presented in our annual field report. This report can be found at: <http://www.nwd-wc.usace.army.mil/tmt/documents/fish/2012/>.

PRELIMINARY RESULTS

All data presented here are preliminary as of the status report date. Predation figures are unexpanded (unless otherwise noted) and sea lion abundance estimates will likely change as the season progresses and data are proofed and analyzed, so please use these estimates with appropriate caution. A final report summarizing the results of the 2012 evaluation will be available in the fall of this year.

PINNIPED ABUNDANCE

Both Steller sea lions (*Eumetopias jubatus* - SSL) and California sea lions (*Zalophus californianus* – CSL) numbers grew this past week (Figure 1). Average daily SSL numbers are similar to last year (figures 1 and 2). The maximum number of Pinnipeds seen any day so far this year was 37 (on April 17). The maximum number of of SSL seen any day so far this year was 29 and 10 for CSL (Figure 1). CSL average numbers present per day this year is lower than last year (Figures 2), which is the lowest for CSL since 2002. We have documented about 59 different SSL's visiting the dam so far and 26 CSL. At least 30 of the SSL are confirmed as seen in past years, and 20 of the CSL.

PREDATION DATA

Unexpanded numbers for fish observed taken in the Bonneville Dam tailrace for 2012 (through April 18) are:

<i>Prey</i>	<i>California Sea Lions</i>	<i>Steller Sea Lions</i>	<i>Total</i>
Chinook	75	69	144
Steelhead	41	96	137
Sturgeon	0	1336	1336
Lamprey	6	2	8
Shad	3	25	28
Smolt	0	0	0
Other	0	0	0
Unknown	14	202	216

It is likely that at least 90% of the unknown fish caught by Steller sea lions were sturgeon. The Steller sea lions are catching many of the fish at the downstream range of our viewing area, making fish identification very difficult. Most sturgeon have been caught in powerhouse 2 tailrace, followed closely by the spillway, while relatively few are caught at powerhouse 1 (Figure 3). Sturgeon catch (expanded for weekends only) is less than last years at this time (Figure 4), but still higher than previous years, most taken being in the 2 to 4 foot range. This year there seems to be more of the larger sturgeon taken than previous years, however there are also many more with no recorded size associated with them. It appears the spring Chinook run has begun to pick up. To date, 3,753 steelhead and 1,463 Chinook have passed the count station windows at Bonneville Dam from January 1 through April 19. The low Chinook count is indicating a late run this year, with a lower cumulative count through April 19 than the last several years at least. Total salmonid catch by sea lions through April 18 (376 expanded by interpolating for weekends) is lower than any year since we began observing (2011 – 826, 2010 – 2,385, 2009 – 1,730, 2008 – 2,046, 2007 – 1,466, 2006 – 770, 2005 – 503, 2004 – 2,106, 2003 – 1,306, 2002 - 525). Figure 5 shows just how few salmonids have been caught so far this year compared to previous years.

Predation on salmonids by CSL in particular is far lower than any previous year monitored (Figure 6). SSL predation on salmonids is less than the previous two years, but more than all the other years we have observed (Figure 7).

DETERRENTS/TRAPPING

Hazing by USDA (land) began on March 1 and will continue until the end of May, seven days a week. CRITFC began hazing from boats March 5th.

The states did not remove any CSL this week, nor did they brand any CSL or SSL. All captured animals were already branded. Shedd Aquarium has filed the paperwork necessary to accept one of the CSL on the removal list, providing it passes the health exam.

OTHER ITEMS OF INTEREST

CRITFC conducted a survey from the I205 bridge to Tanner Creek earlier this week and spotted 11 SSL in the water (one with a sturgeon kill) and six CSL in the water. They also spotted two SSL on Phoca Rock. During the same time period, we had at least 14 SSL and four CSL in the Bonneville Dam tailrace area and observed zero sturgeon and 7 Chinook being preyed upon by the pinnipeds.

There continues to be sightings of possibly two CSL in the Stevenson area upstream of Bonneville Dam on April 10, 13, and 17 and damage caused to tribal fishing nets. We continue to monitor when time and personnel permit.

Figure 1. Daily pinniped abundance, by species, at Bonneville Dam, 2012.

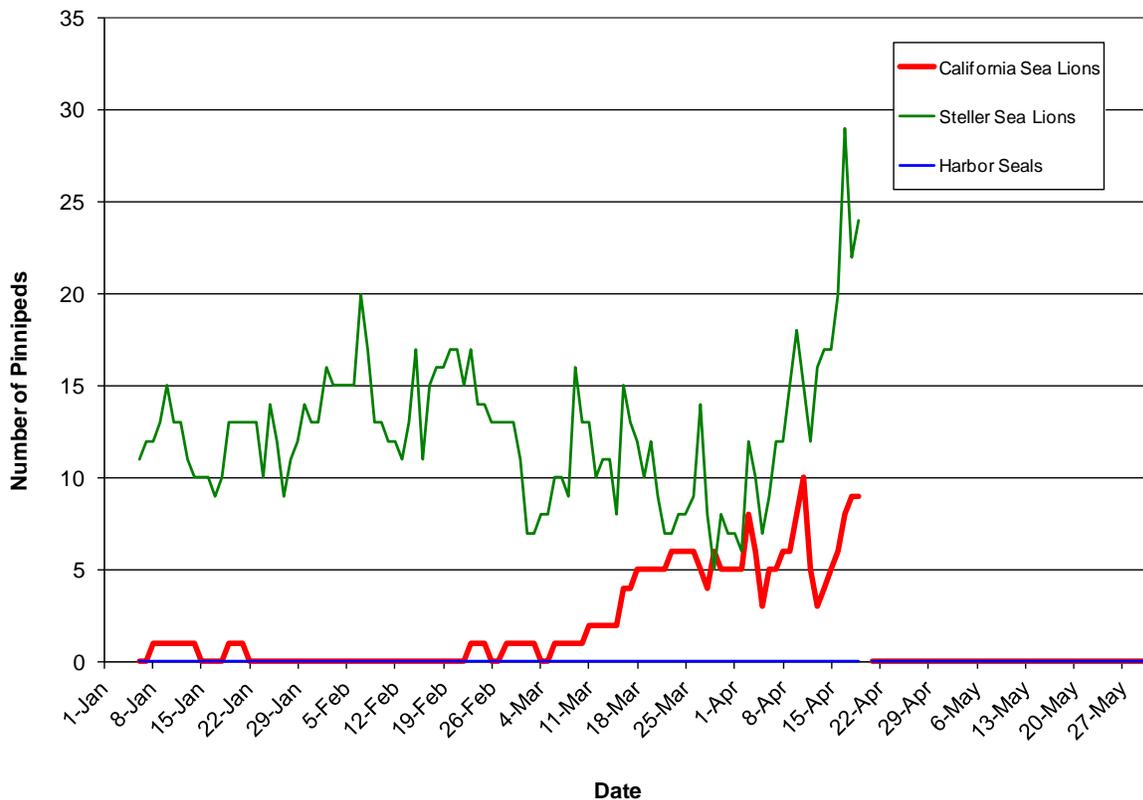


Figure 2. Average daily presence of pinnipeds, by species, to date (April 19) for each year at Bonneville Dam.

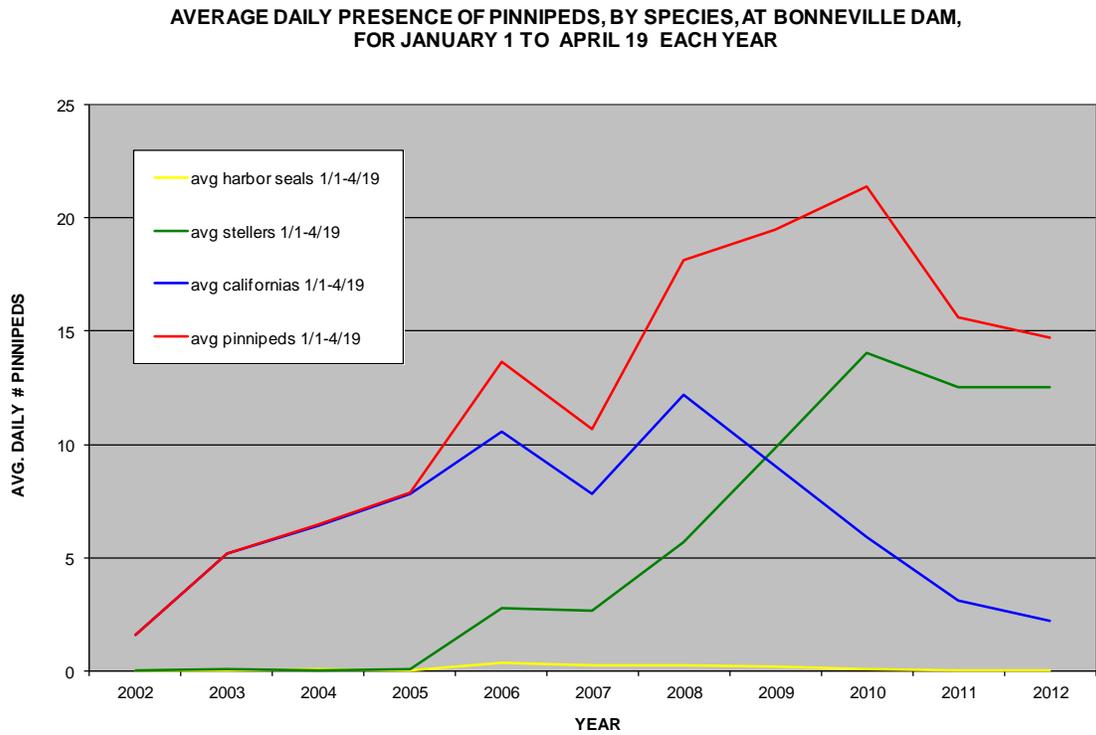


Figure 3. Distribution of prey taken by Pinnipeds by location at Bonneville Dam, through April 18, 2012.

