

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

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This is the sixth weekly status report for 2012 and summarizes all pinniped predation monitoring and deterrent activities at Bonneville Dam from January 1 through April 4, 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

California sea lions (*Zalophus californianus* – CSL) numbers stayed about the same as last week (Figure 1), with up to eight seen in one day. Steller sea lions (*Eumetopias jubatus* - SSL) are slightly less abundant as last year (figures 1 and 2). The maximum number of SSL seen any day so far this year was 20 and eight for CSL (Figure 1). SSL and CSL average numbers present per day this year is now lower for both than last year (Figures 2), which is a high for SSL and the lowest for CSL since 2002. We have documented approximately 48 different SSL’s visiting the dam so far and eleven CSL. At least 24 of the SSL are confirmed as seen in past years, and nine of the CSL.

PREDATION DATA

Unexpanded numbers for fish observed taken in the Bonneville Dam tailrace for 2012 (through April 4) are:

<i>Prey</i>	<i>California Sea Lions</i>	<i>Steller Sea Lions</i>	<i>Total</i>
Chinook	31	15	46
Steelhead	36	86	122
Sturgeon	0	1316	1316
Lamprey	3	1	4
Shad	3	25	28
Smolt	0	0	0
Other	0	0	0
Unknown	8	186	194

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. Few fish are passing the count stations (3,239 steelhead and 67 Chinook) from January 1 through April 4, more than last year but less than 2010 and about average for the past several years. The low Chinook count is indicating a late run this year, with a lower cumulative count through April 4 than the last several years at least. Total salmonid catch by sea lions through April 4 (224 expanded by interpolating for weekends) is lower than any year since 2002, excluding 2005 in which we did not begin observations until late in the season (2011 – 537, 2010 – 1009, 2009 – 749, 2008 – 908, 2007 - 552, 2006 – 611, 2005 – 112, 2004 – 778, 2003 - 431, 2002 - 166).

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 trapped seven Steller sea lions last week, two already had brands and were released, one was too large for the squeeze cage used for branding, and the remaining four were branded (O27-O30) and released. Two California sea lions were also trapped this week, both being on the list for removal (C01 and C015), and were euthanized.

OTHER ITEMS OF INTEREST

There was a report of a CSL in the forebay eating a steelhead, just upstream of the dam. We have yet to determine if it is the same one that has been upriver all year long or a new one that recently was locked upstream.

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

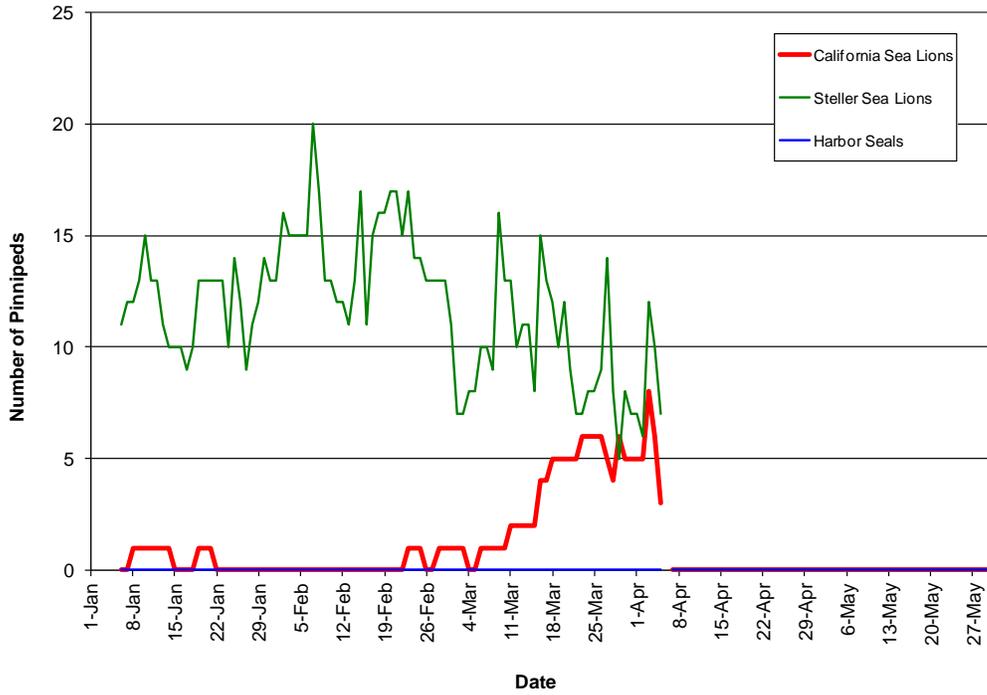


Figure 2. Average daily presence of pinnipeds, by species, to date (April 5) for each year at Bonneville Dam.

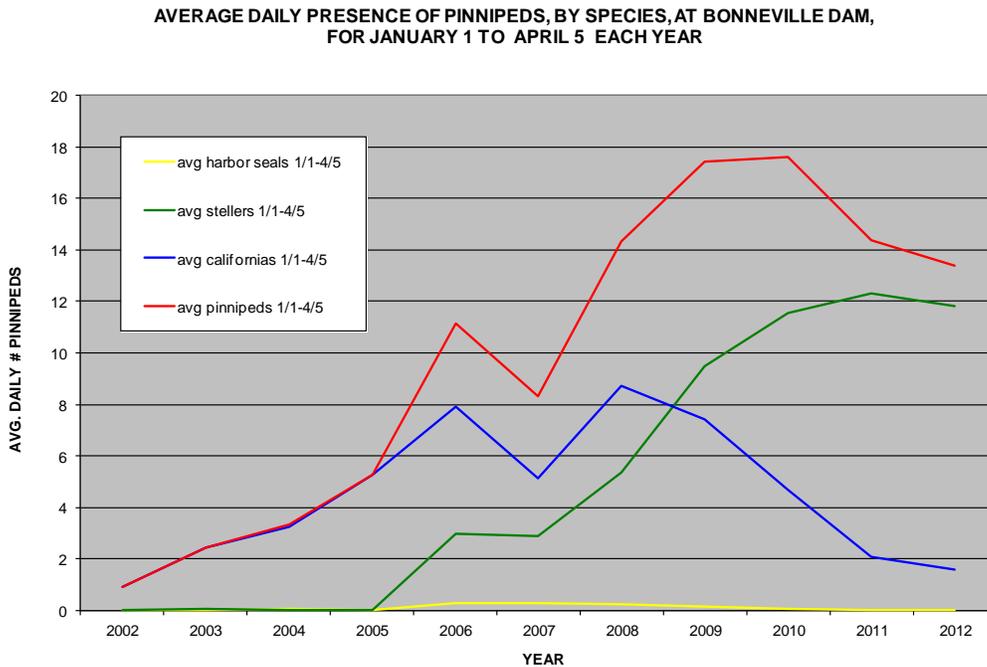


Figure 3. Distribution of prey taken by Pinnipeds by location at Bonneville Dam, through April 4, 2012.

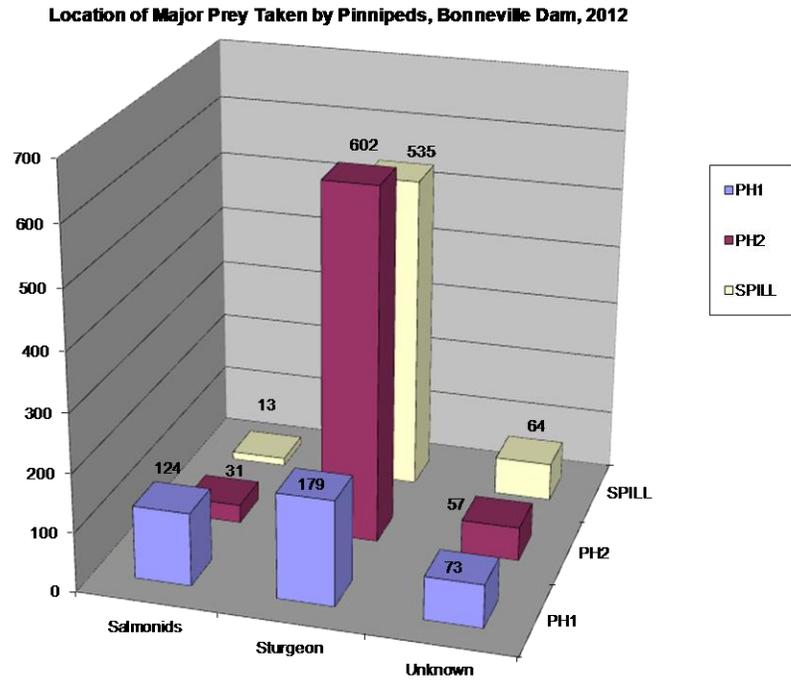


Figure 4. Daily cumulative sturgeon catch (interpolated for weekends) at Bonneville Dam, 2006-2012.

