

# STATUS REPORT - PINNIPED PREDATION AND DETERRENT ACTIVITIES AT BONNEVILLE DAM, 2013

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This is the second weekly status report for 2013 and summarizes all pinniped predation monitoring and deterrent activities at Bonneville Dam from January 1 through February 20, 2013 (unless otherwise noted). Regular daylight observations began January 4 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/>

## 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 2013 evaluation will be available in the fall of this year.*

### PINNIPED ABUNDANCE

California sea lions (*Zalophus californianus* – CSL) have remained scarce so far this year (Figure 1), with only one observed on three separate days. We were unable to identify the CSL, and no predation was observed by CSL yet. Steller sea lions (*Eumetopias jubatus* - SSL) are slightly less abundant than the past two years (figures 1 and 2). The maximum number of SSL seen any day so far this year was 21 and only 1 for CSL (Figure 1). We have documented approximately 30 different SSL's visiting the dam so far. All of the SSL are confirmed as seen in past years, although there may be some new individuals we have not confirmed yet.

A few SSL have been observed hauling out inside the end of the corner collector outfall, but mostly they are resting in the water in large pods in the spillway. The traps have been closed since early January.

## **PREDATION DATA**

Unexpanded numbers for fish observed taken in the Bonneville Dam tailrace for 2013 (through February 20) are:

<i>Prey</i>	<i>California Sea Lions</i>	<i>Steller Sea Lions</i>	<i>Total</i>
<b>Chinook</b>	0	1	1
<b>Steelhead</b>	0	27	27
<b>Sturgeon</b>	0	251	251
<b>Lamprey</b>	0	4	4
<b>Shad</b>	0	65	65
<b>Smolt</b>	0	0	0
<b>Other</b>	0	0	0
<b>Unknown</b>	0	51	51

It is likely that most 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 the spillway tailrace, followed by the powerhouse 2 tailrace, while relatively few are caught at powerhouse 1 (Figure 3). Sturgeon catch (414 expanded for weekends only) is the lowest rate since 2007 at this time of year (Figure 4), most taken being in the 2 to 4 foot range. Few fish are passing the count stations (300 steelhead and 1 Chinook) from January 1 through February 19, lower than the last three years. Total salmonid catch through February 20 (44 expanded by interpolating for weekends) is fewer than the past seven years (2012 – 100, 2011 – 100, 2010 – 127, 2009 – 78, 2008 – 111, 2007 – 163, 2006 - 59), all by Steller sea lions.

## **DETERRENTS/TRAPPING**

Hazing by USDA (land) will begin on March 1 and will continue until the end of May, seven days a week. CRITFC will begin hazing from boats March 4.

February 15, Judge Simon ruled in favor NOAA and to allow the states to continue the lethal removal program for specific CSL through June of 2016.

## **OTHER ITEMS OF INTEREST**

WDFW reported seeing 19 SSL on Phoca rock (near Cape Horn) on the Columbia River February 20 in the afternoon, and a PSU student took a photo of a SSL below Hawthorn Bridge (over the Willamette River) on February 18. Since we have been seeing only about 5-8 SSL at Bonneville recebtkt, it appears the majority are hunting elsewhere which is not surprising as there appear to be very few fish present at Bonneville at this time.

A Steller sea lion was observed in the navigation lock just before the upstream gate was opened to let a barge headed downstream into the lock on the 18th. The lock operators drained the lock, watched the sea lion swim out downstream, and then re-filled the lock before letting the barge in to pass downstream. A big thank you goes to the Bonneville Lock operator staff for this action.

Figure 1. Daily pinniped abundance, by species, at Bonneville Dam, 2013.

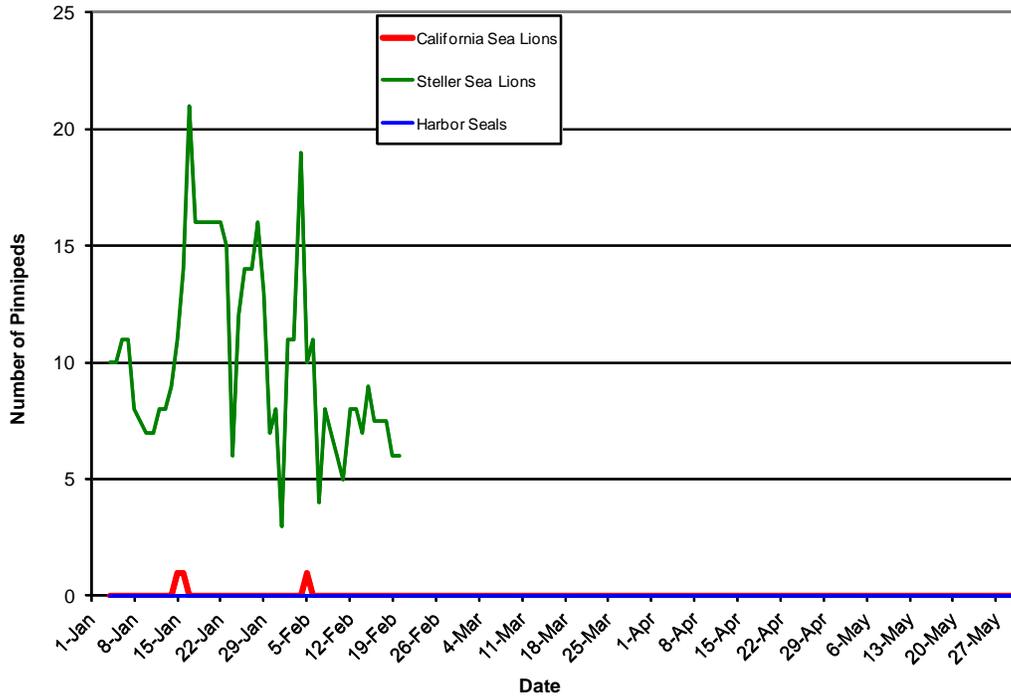


Figure 2. Average daily presence of pinnipeds, by species, to date (February 20) for each year at Bonneville Dam.

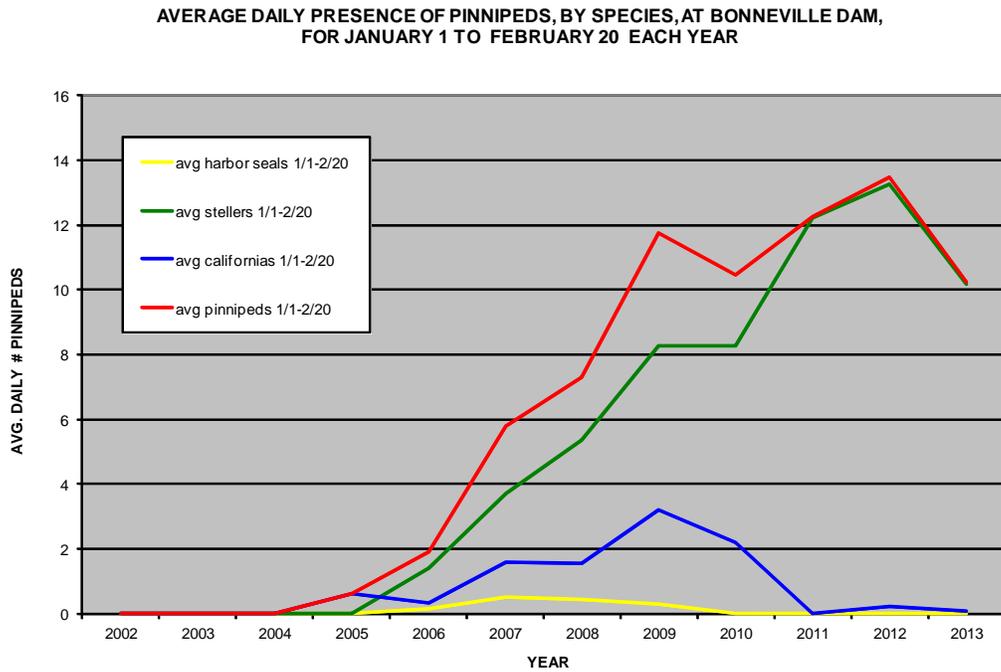


Figure 3. Distribution of prey taken by Pinnipeds by location at Bonneville Dam, through February 20, 2013.

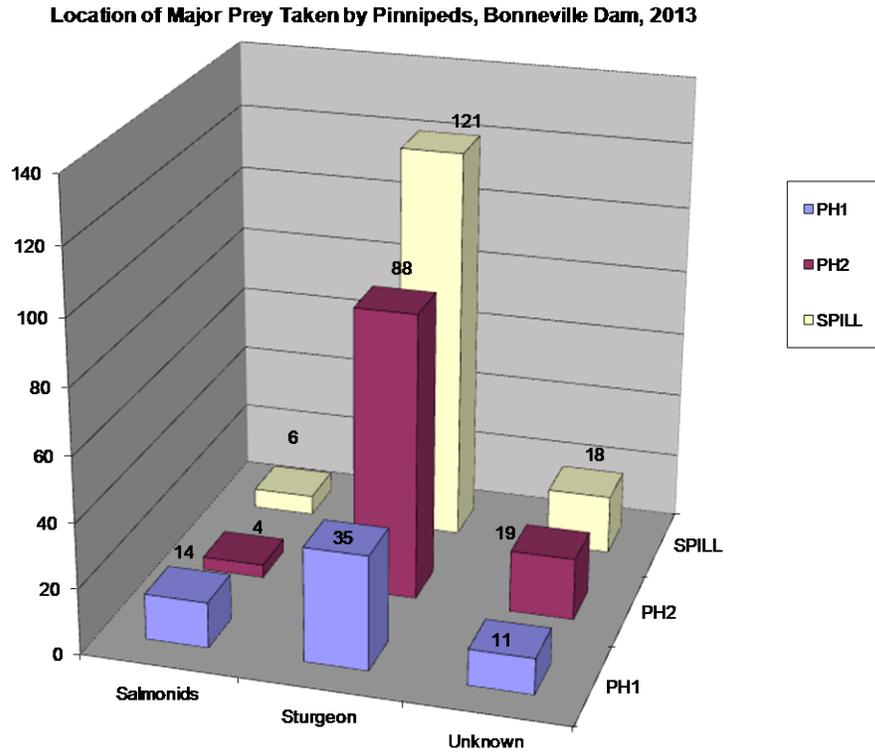


Figure 4. Daily cumulative sturgeon catch (interpolated for weekends) at Bonneville Dam, 2006-2013.

