

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 March 6, 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/2013/sea_lion_hazing2013.html

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 four separate days, including this past Tuesday. 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 37 different SSL’s visiting the dam so far. All but three 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 March 6) are:

<i>Prey</i>	<i>California Sea Lions</i>	<i>Steller Sea Lions</i>	<i>Total</i>
Chinook	0	5	5
Steelhead	0	32	32
Sturgeon	0	266	266
Lamprey	0	6	6
Shad	0	69	69
Smolt	0	0	0
Other	0	0	0
Unknown	0	57	57

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 (432 expanded for weekends only) is the lowest rate since 2006 at this time of year (Figure 4), most taken being in the 2 to 4 foot range. Few fish are passing the count stations (627 steelhead and 16 Chinook) from January 1 through March 5, lower than the last three years. Total salmonid catch through March 6 (57 expanded by interpolating for weekends) is fewer than any previous year (Figure 5) excluding the early years when no sea lions were present.

DETERRENTS/TRAPPING

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

OTHER ITEMS OF INTEREST

Steve Jeffries of WDFW reported observing 16 SSL on Phoca rock on March 1 and we had about 12 present at Bonneville Dam. CRITFC relayed a report of a CSL with a large sturgeon near navigation marker 60 up in the Bonneville pool, also on March 1. Today, March 7, CRITFC said they observed 19 SSL on Phoca rock while we have very few here at Bonneville Dam. CRITFC also relayed a report of a CSL with a large sturgeon near navigation marker 60 up in the Bonneville pool, also on March 1. Tom Murtagh of ODFW reported that the hazers at Willamette Falls had been seeing about 2 to 7 CSL in early February but lately have observed only 2 to 4. He mentioned that the steelhead counts are about half of the 10 year average at this point, but things will likely change when the Chinook run starts. Matt Tennis, PSMFC, reports they are seeing more CSL than normal this time of year in Astoria (289 today, 25 or 9% branded) and the majority seem to be unbranded “new” skittish individuals likely feeding on smelt. Normally, around 50% of the individuals seen are branded.

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

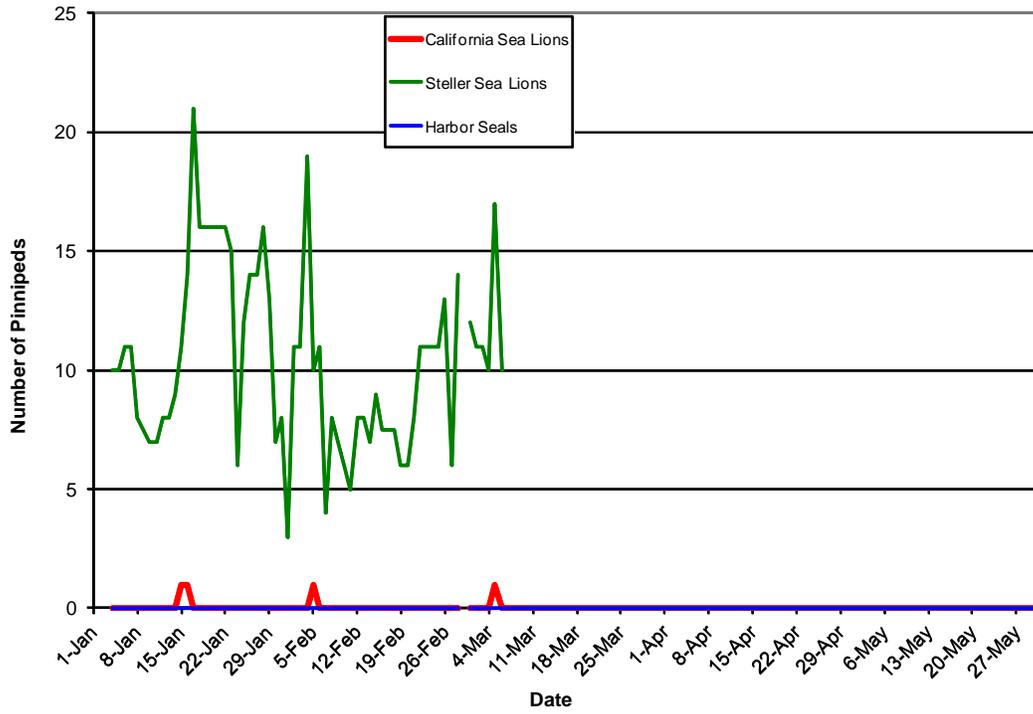


Figure 2. Average daily presence of pinnipeds, by species, to date (March 6) for each year at Bonneville Dam.

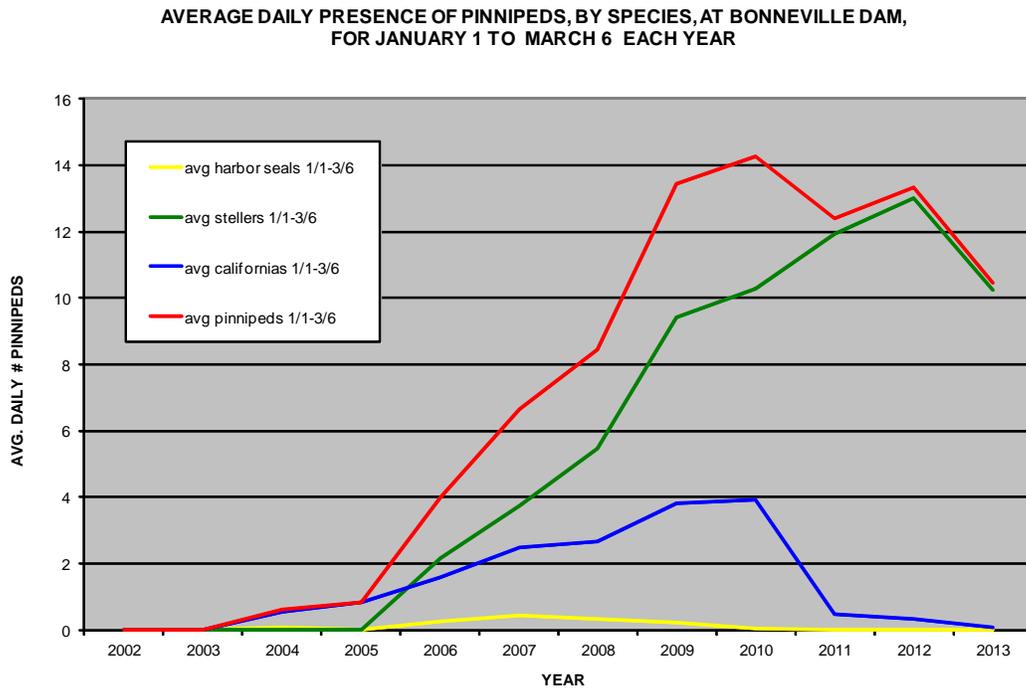


Figure 3. Distribution of prey taken by Pinnipeds by location at Bonneville Dam, through March 6, 2013.

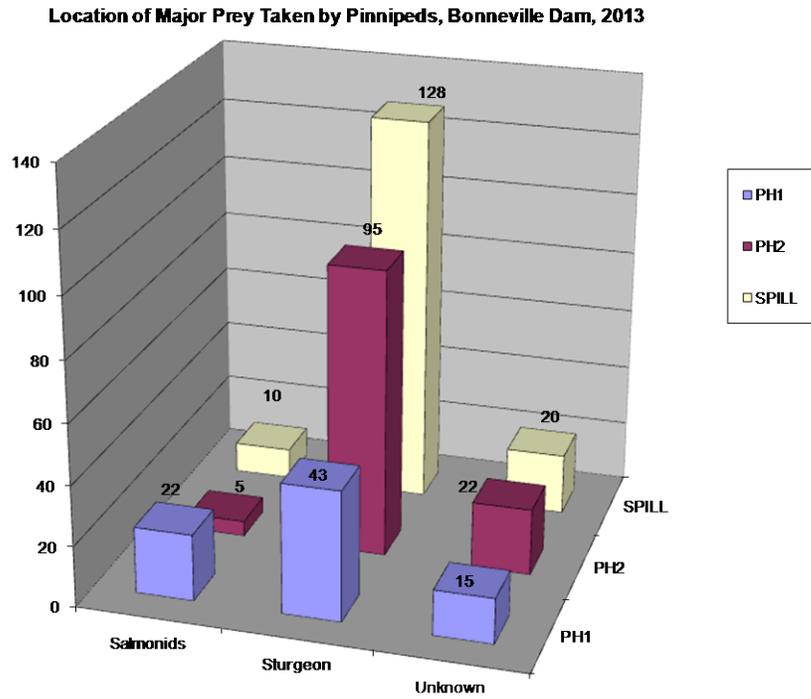


Figure 4. Daily cumulative sturgeon catch (interpolated for weekends) at Bonneville Dam, 2006-2013.

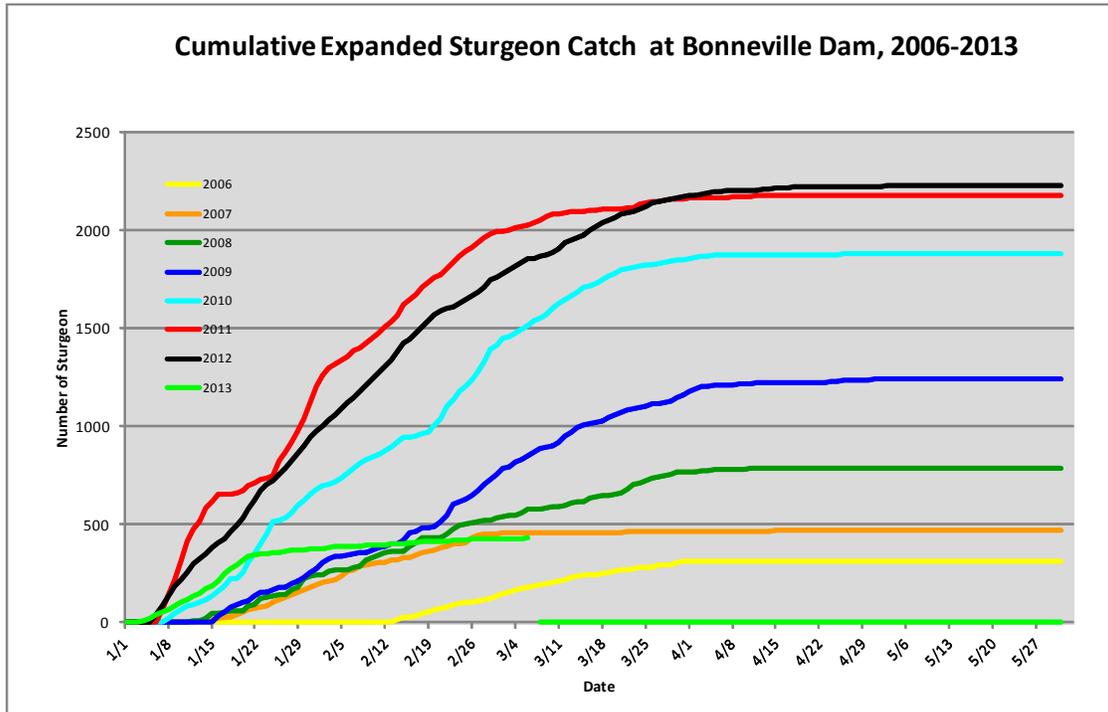


Figure 5. Daily cumulative salmonid catch (interpolated for weekends) at Bonneville Dam, through March 6 for 2002-2013.

