



Monthly Report by WS for  
Bonneville Dam  
May 2023

**Pinniped and Piscivorous Bird Hazing at  
Bonneville Dam:  
May 2023 Monthly Report to  
USACE**



**United States Department of Agriculture  
Animal and Plant Health Inspection Service  
Wildlife Services**

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## **Introduction:**

An interagency agreement U.S. Army Corps of Engineers (USACE) and the U.S. Department of Agriculture, Animal and Plant Health Inspection Service, Wildlife Services (WS) was established at the Bonneville Dam (BON) for the purposes of reducing predation on sturgeon and migrating adult salmonids and lamprey through vigorous hazing of pinniped species, primarily California sea lions and Steller sea lions, and piscivorous birds.

Through that agreement, WS is to provide a monthly work activities statement to USACE detailing date and hours of pinniped and piscivorous bird hazing, non-lethal dispersal numbers, and a summary of activities.

## **Wildlife Services Decision Model:**

When identifying wildlife damage and evaluating management methods, each damage issue is afforded a systematic approach to decision making referred to as the WS Decision Model (WS Directive 2.105). The WS Decision Model contains the following steps:

- I. Assess the Problem
- II. Evaluate management methods.
- III. Formulate a management strategy.
- IV. Provide assistance.
- V. Monitor and evaluate results.

## **May 2023 Summary:**

WS continues to be understaffed per contract for the month of May. Hiring new specialists has been a problem for 2023 for all of Wildlife Services' piscivorous bird hazing projects across the Snake and Columbia Rivers. The hazing coverage by WS for Bonneville Dam for May was one Specialist on-site at a time for 12 hours a day for 7 days a week.

WS seasonal employees at BON worked 372 hours for 31 days during the month of May (split between two people) of deck hazing. Employees were able to perform their duties daily with no significant incidences or inhibitors.

A variety of different hazing techniques are used to avoid habituation—exposing animals to the same non-lethal methods (i.e., using the same pyrotechnics) over time will eventually lead to ineffectiveness. Some distinct types of pyrotechnics used at BON include: 15mm rounds (an assortment of bangers, green bangers, screamers, silver comets, and comet bangers), M-80's, cracker shells, and xtended range rockets.

In 2022 we stopped using a Specialist favorite in the “long-range” cracker shells. The long-range cracker shell was designed as a 3” cartridge that had 2x the distance as the 2 ¾” cracker shell. But in 2022, the 3” rounds we purchased didn't perform any better than the 2 ¾” cracker

shell but cost twice as much. We decided we would hold off on purchasing more 3” rounds until the manufacturer sent us a sample that performed like the rounds of old.

We have looked at other types of pyro and different vendors to increase our diversity to further reduce the habituation to what we do use. Rounds such as a 12-gauge screamer and other variants are available for us to purchase. While there are some other types on the market, we have not brought them in because they have similar sound effects to what we already use but at a greater cost.

During the month of May, WS fired 1,895 rounds of pyrotechnics, hazing a total of 282 Steller sea lions, 755 California sea lions, 3,175 Gulls, 609 Cormorants, 14 Mergansers, and 38 Herons.

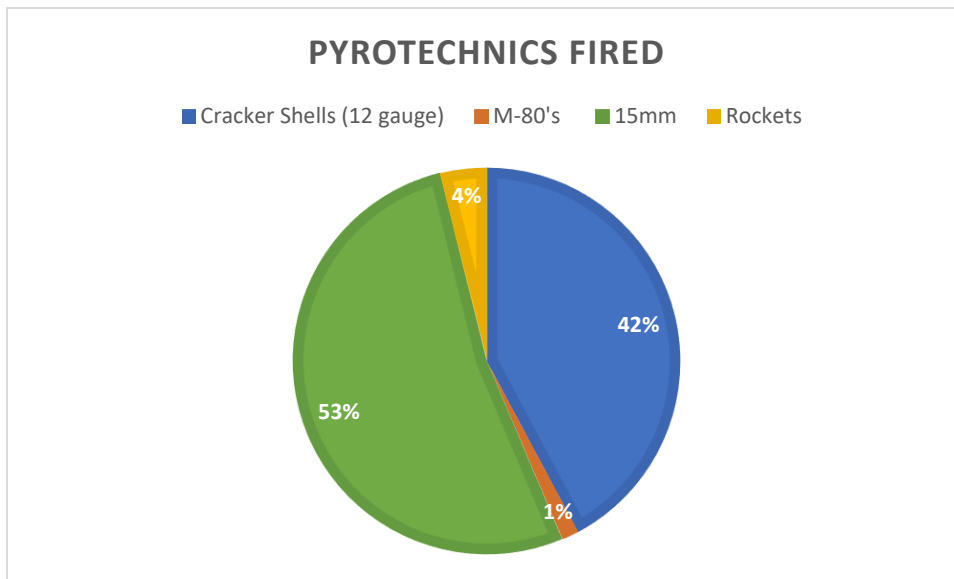
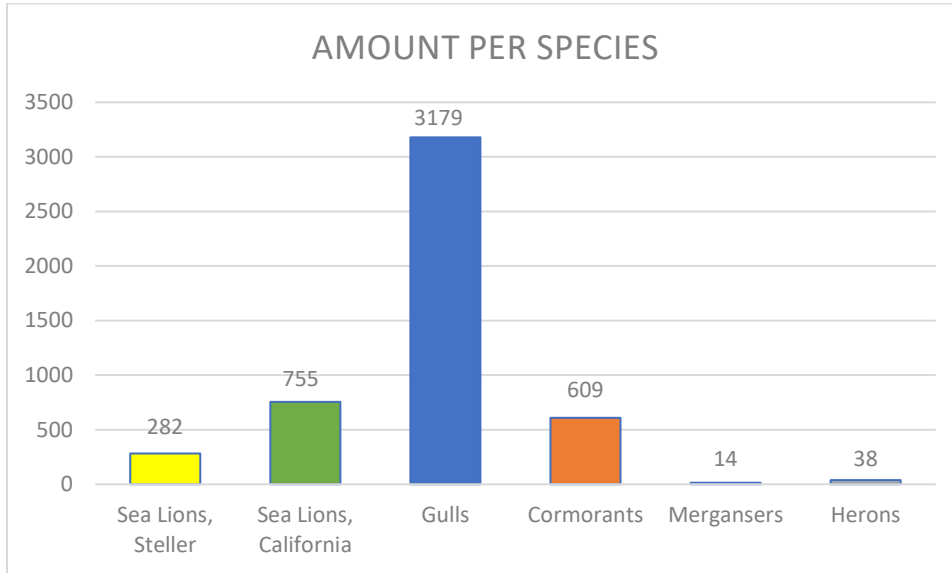


FIGURE 1. PYROTECHNICS USED BY TYPE.

Pyrotechnics	Quantity
15mm	995
Cracker Shells (12 gauge)	800
Rockets	73
M-80's	27
<b>Total</b>	<b>1895</b>

FIGURE 2. QUANTITY OF PYROTECHNICS USED.

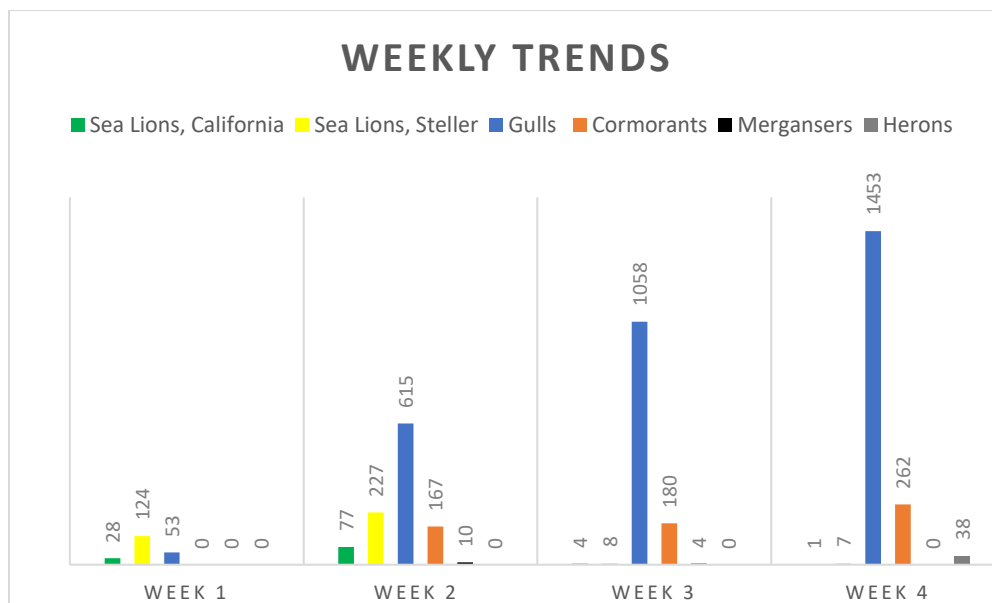


**FIGURE 3. AMOUNT OF NON-LETHAL DISPERSALS BY SPECIES.**

### Observations/Discussion

Weekly trends show pinniped numbers significantly decreasing after the second week of May, while bird numbers have increased (Figure 4). Most piscivorous birds hazed have been gulls. While overall pyrotechnic usage has decreased in May, figure 1 shows an improvement on diversity of dispersal methods used.

WS employees will prioritize hazing piscivorous birds for June and July. The contract calls for pinniped hazing April 1 through May 31 and August 15 through October 31. Hours of operation will shift from 12-hour shifts, 7 days a week, to 8-hour shifts, 7 days a week beginning in June.



**FIGURE 4. AMOUNT OF NON-LETHAL DISPERSALS BY SPECIES.**



### **Incident Reports.**

There were two reported incidents in May, both minor. The first, occurring early May (10<sup>th</sup>), involved a WS-employee shooting pyrotechnics near a family, which later voiced their concern over noise, and safety issues. The incident was reported and USACE staff at Bonneville met with the WS employee, and later had discussions with the WS Project Leader and WS District Supervisor. The noise from the pyrotechnics occurs out away from the hazer, so general public standing near the hazer will have the same levels as the hazer. WS and USACE discussed adding informational signage to the area to educate the public and dam's visitors. In addition, WS-employees are encouraged to speak with and briefly educate the public before shooting any pyrotechnics.

The second incident occurred near the end of May (22<sup>nd</sup>), where a grassy area near the corner collector was ignited and created a small fire. WS-employees are trained only to shoot over water, and to be extremely cautious during wind events.