



## Camas Lily Monitoring in the UCBN

### Network parks where resource is being monitored

- Big Hole National Battlefield
- Nez Perce National Historical Park (Weippe Prairie)

### Importance: A culturally and ecologically significant species

Camas lily (*Camassia quamash*) is a perennial bulb-producing plant that was and remains one of the most widely utilized plant foods of the Nez Perce people, and was a focal resource at many of the significant historical events memorialized today by Nez Perce National Historical Park (NEPE) and Big Hole National Battlefield (BIHO). Large expanses of camas in bloom were noted by numerous explorers and botanists that entered the Pacific Northwest in the 19<sup>th</sup> century, including the Lewis and Clark expedition, and which were frequently described as “blue lakes” when viewed from a distance. The extent of the wet prairie ecosystem type has been drastically reduced in the Columbia Basin as a result of agricultural conversion, irrigation and flood control development, and other land use practices. Camas populations today are well below historic levels in many locations, including those at Weippe Prairie and along the Big Hole River.



Camas lily (*Camassia quamash*)

### Status and Trends

The National Park Service initiated a camas monitoring program at NEPE and BIHO in 2005, assisted in large part by student “citizen scientists” who have been participating in annual spring field data collection. Camas is measured by counting the number of individual stems within narrow sampling frames or “quadrats”. Crews use GPS receivers to locate quadrat positions, and then carefully sweep through the dense wetland vegetation to identify all established camas plants. The number of flowering camas plants and the presence of two invasive weeds are also noted at each location. Current estimates show a stable to slightly increasing trend across all camas populations in NEPE and BIHO. Rates of invasion by non-native sulphur cinquefoil and orange hawkweed in Weippe Prairie appear to be stable or slightly decreasing

### Monitoring Objectives

- Estimate status and trend in camas stem density, flowering camas stem density, and frequency of targeted invasive plants in NEPE (Weippe Prairie) and BIHO.

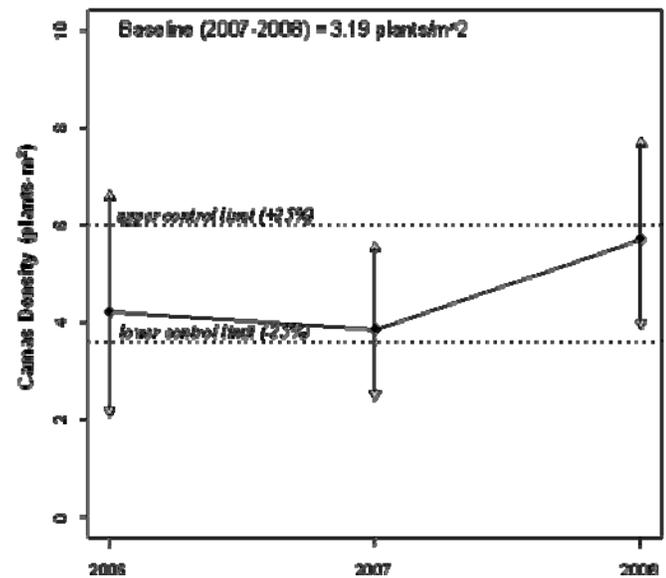
### Management Applications

- Indicate park ecological condition.
- Provide feedback on the timing and intensity of park management and restoration activities.
- Inform integrated assessments of climate change impacts on park resources
- Support park resource planning and land health reporting efforts

### Contact Information

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Big Hole National Battlefield 2006-2008



Stable to slightly increasing trend in BIHO, 2006-2008