



Crater Lake National Park Botany Program

Rare Plant Report

Crawford's Sedge (*Carex crawfordii*) at Spruce Lake

2013



ON THE COVER

Spruce Lake facing east; summer season water level minimum taken Sept. 10, 2013

Photograph by: Melody Fredeic, Biological Science Technician

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U.S. Department of the Interior
National Park Service

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Introduction

During the summer of 2013 an inventory of the rare plant species Crawford's Sedge (*Carex crawfordii*) was conducted around Spruce Lake on the northwestern side of Crater Lake National Park. Individual clumps of *C. crawfordii* were counted and the general dispersal pattern around the lake was recorded. Interactions and potential conflict with invasive species were noted.

Methods

Individual clumps of sedge stems were counted as one plant. They were visually noted and enumerated with a SAFINA mechanical counter. Data points were taken with a GPSmap 60Cx GARMIN unit.

Results

Crawford's Sedge (CAR CRA) was found as expected in the "bathtub ring" region (Wilson 2008) around the lake (Appendix 1), primarily on the north shore of Spruce Lake. The CAR CRA was sandwiched between *Carex lenticularis* at the water's edge and Poaceae species at the forest edge. Individual clumps of sedge stems were counted as one plant and the clumps varied in diameter from 1" to 6" and in stem count from 2 to several dozen fruiting stems. There were 374¹ clumps counted, mainly clustered around the fallen logs at the northwest corner of the lake but with a few scattered all the way to the northeast corner.

In the northwest corner², where the sedge is densest, the CAR CRA is in competition with the local infestation of Canada Thistle (*Cirsium arvense*). Other invasive species were observed to be scattered throughout the *C. crawfordii* population but could be easily removed without great disturbance. During the 2013 season treatment of the CIR ARV the CAR CRA was trampled and disturbed by the removal of the thistle. Any herbicide treatments of the CIR ARV will have to take the CAR CRA into account.

¹ The actual count of CAR CRA plants is probably higher by approximately a dozen as at the time of the survey the Pink Spirea (*Spiraea douglasii*) which bordered the CAR CRA stand was swarming with stinging insects and the surveyor deemed the situation unsafe to disturb them to get a count of the sedges where the species overlapped.

² Canada Thistle location is UTM_e 0557289, UTM_n 4758072 (NAD83, Projection 10, error ~5m)

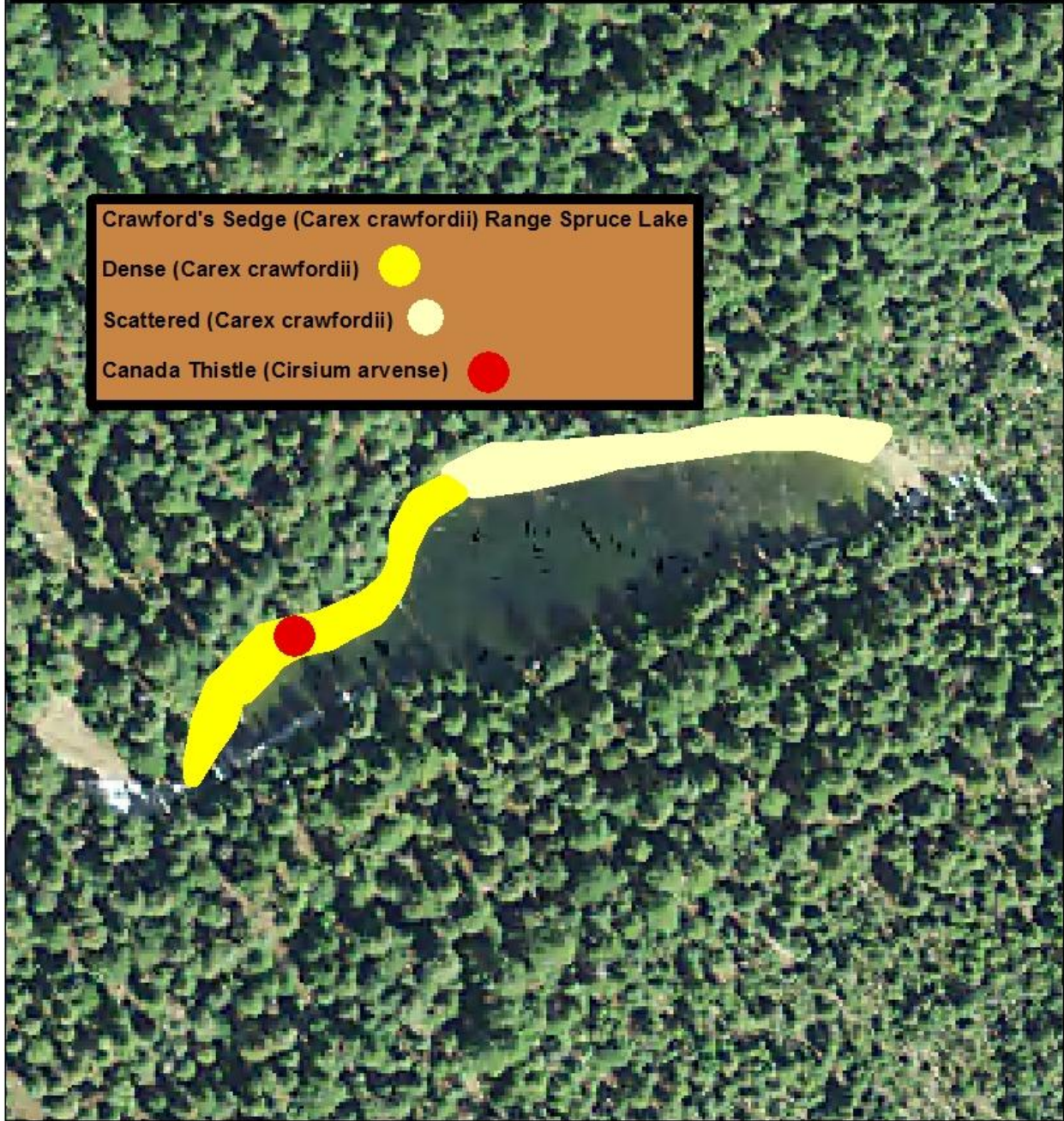
Bibliography

Wilson B.L, Brainerd R., Lytjen D., Newhouse B., Otting N.; 2008. Field Guide to the Sedges of the Pacific Northwest. Oregon State University Press Corvallis.


Appendix 1 - Map

Crater Lake National Park
Crawford's Sedge (*Carex crawfordii*)
Spruce Lake

National Park Service
U.S. Department of the Interior



Crawford's Sedge (*Carex crawfordii*) Range Spruce Lake

Dense (*Carex crawfordii*) 

Scattered (*Carex crawfordii*) 

Canada Thistle (*Cirsium arvense*) 

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October 18, 2011
3:77663634_Batch1_NonNativePlants2011_02 (10/18/2011).indd



1 inch = 0.02 miles

1:1,407

0 0.0125 0.025 0.05 Miles

Map Projection:
UTM Zone 10 North, NAD 83