

Geospatial distribution and genetic analysis of *Cortaderia* species in the Pacific Northwest

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Introduction

The status of *Cortaderia* in the Pacific Northwest (PNW) has not been examined on a regional scale. The invasiveness of both Pampas (*C. selloana*) and jubata (*C. jubata*) in California and other Mediterranean climates is researched and documented in the literature. Both of those *Cortaderia* species were just added to the Washington State Noxious Weed list but not much is known about their distribution.

Question

Given the popularity of Pampas grass in landscaping in the PNW, its invasive tendencies in California, and the number of multi-age stands found across WA and OR, what risk of invasion does this plant pose for the PNW?

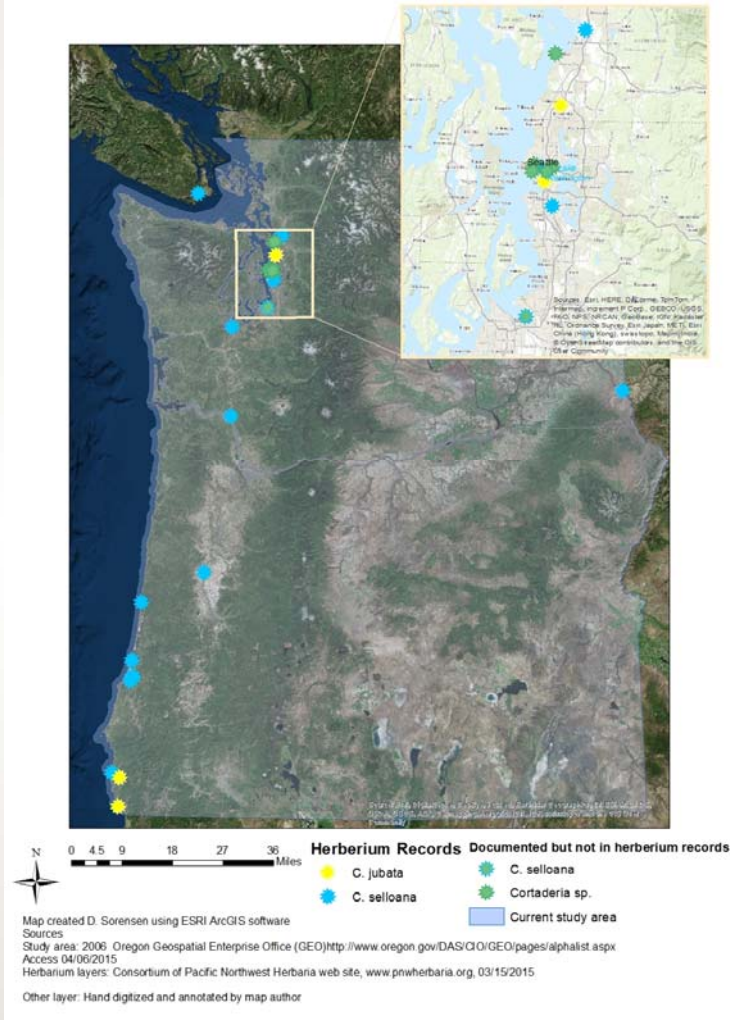
Project Goals

- Better understand the distribution and status of *Cortaderia* in Washington and Oregon (possibly elsewhere).
- Use findings to inform the actions land managers and weed specialists.



Photograph of *Cortaderia selloana* in Olympia WA
(photo courtesy of Rick Johnson, Thurston County Noxious Weed Control)

Locations of *Cortaderia* throughout Oregon and Washington based on herbarium records and other documentation.



Methods

-Geospatial analysis- Through geospatial analysis of herbarium records and other known locations investigate distribution of *Cortaderia*. Use GIS technology to create database and display (see above).

-Genetic analysis- use microsatellite genotyping to determine what species is invading at selected locations. These locations are not yet determined. Analysis will be performed by the Jasieniuk lab at UC Davis (pending funding).

Questions? Please contact me at dgs7@uw.edu