



Washington Rare Plant Care and Conservation





Sponsored by:
 National Fish and Wildlife Foundation
 The Miller Charitable Trust
 The Bullitt Foundation
 The Hugh and Jane Ferguson Foundation
 The Mountaineers Foundation


Rarity vs. Endemism

What is a rare plant species?

- ◆ Low abundance
- ◆ Often have a small range
- ◆ Often occupy unique habitats



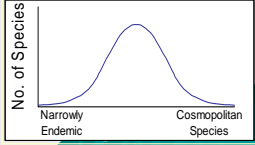
Loiseleuria procumbens
State Threatened



Eriogonum codium
Federal Candidate Species
State Endangered


What is an endemic plant species?

- ◆ Occurs only within a specific geographic area




Causes of Rarity

- ◆ Unique habitat or environments
- ◆ Loss of habitat
- ◆ Temporal changes in climate
- ◆ Biotic factors
- ◆ Low reproductive success



Washington State Rare Plants

- ◆ 370 plant species tracked by the Washington Natural Heritage Program (WNHP):
 - 43 considered endangered
 - 108 considered threatened
 - 19 considered possibly extirpated/extinct
- ◆ Washington has no ESA for plants
- ◆ Federal ESA Status
 - 4 listed endangered
 - 6 listed threatened
 - 5 candidate species
 - 48 species of concern



Silene spaldingii
Federal threatened
State threatened

WNHP website: <http://www.dnr.wa.gov/nhp/index.html>

Rare Care's Programs

- ◆ Rare plant seed collection and storage (*ex situ* conservation)
- ◆ Seeds of Success
- ◆ Monitoring
- ◆ Research
- ◆ Public outreach








Ex Situ Conservation – Miller Seed Vault



Vault Features:

- ◆ 150 square feet of space
- ◆ Prep & drying room: 15 C & 22% RH
- ◆ Long-term cold storage: -20° C




Seed Collection

PROJECTS

- ◆ Rare Plant Seed Collections
- ◆ Center for Plant Conservation-National Park Service Collection of *Castilleja levisecta* – collected summer 2005
- ◆ SEEDS OF SUCCESS Native seed collection project through the BLM and Kew Gardens in England



Rare Care trained 11 seed collection volunteers in 2005 bringing our seed collection crew to 61 volunteers.

In situ Conservation Rare Plant Monitoring



- ◆ Partner with Washington Natural Heritage Program (WNHP).
- ◆ Monitor specific populations of rare plants listed in WNHP's database.
- ◆ Monitoring completed by volunteers with training in biological sciences, botany or native plant identification.

Conservation Research



Showy stickseed
Hackelia venusta
Researcher: Jeanie Taylor



Whited's milk-vetch
Astragalus sinuatus
Researcher: Julie Combs



Wenatchee Mountain checker-mallow
Sidalcea oregana var. calva
Researcher: Tara Goldsmith Zimmerman



Golden Paintbrush
Castilleja levisecta
Researcher: Wendy Wayne

Program Funding

