

Native Plants R Us-- Restoration and Revegetation in Region One



ImaginNation
2018



Did U know...?

Region One's goals are to increase the capacity of forests and grasslands to successfully **acquire** and **use** native plant material for re-vegetation and restoration



Challenges

- How do we implement the 2008 USFS National Native Plant policy requiring the use of locally-adapted native plant material as a first choice for revegetation?
- What are our present and future plant material needs, by forest and grassland?
- How do we acquire cost-effective materials?



And...

- How do we ensure that appropriate material (certified seed, locally adapted seed) is being used so we aren't planting aggressive non-natives or genetically unsuitable material that won't survive?
- How do we prepare for climate change?



2008 USFS Native Plant Policy

- Native plant materials are to be the FIRST CHOICE in revegetation for restoration and rehabilitation of native ecosystems **where timely natural regeneration of the native plant community will not occur.**
- Persistent, non-native, non-invasive plant species are restricted for use.
 - Special circumstances FSM 2070.3 (2)
- Under no circumstances will non-native invasive plant species be used as plant material for restoration, rehabilitation, or reconstruction of native ecosystems.



What are some examples of species occurring in Region One that would be restricted ?

Grasses:

Redtop
Timothy
Orchardgrass
Intermediate wheatgrass
Red fescue
Hard fescue
Sheep fescue
Perennial ryegrass
Altai wildrye

Forbs:

Red clover
White clover
Alfalfa
Sainfoin



However some species are banned under all circumstances due to their invasive or allopathic characteristics

Examples

Grasses:

Smooth brome

Crested wheatgrass

Canada bluegrass/Kentucky bluegrass

Meadow brome

Reed canarygrass

Creeping foxtail

Quackgrass

Forbs:

Sweetclover



What are some of the USFS activities for development of native plant materials?

- Forest/grassland native seed mixes
- Seed transfer zone development for priority species
- Wildland seed collection, grow-out, and increase
- Contingency materials @USFS Coeur d'Alene Nursery seed cache (ex: BAER)
- Native Plants training curriculum



Region One Seed Transfer Zone Study

- Initiated in 2008 to acquire information on seed transfer guidelines for priority revegetation species.
- Utilizes common garden study methodology.
- Contributes to development of cost-effective seed by supporting the increase and availability of seed that can be shared by forests.
- Partners: USFS Coeur d'Alene Nursery and University of Montana researchers, Dr. Cara Nelson and Dr. Alexis Gibson



Seed Transfer Zone Study species

2008—Idaho fescue and bluebunch wheatgrass

2009—Red osier dogwood and white spirea

2010—Rough bentgrass and western pearly everlasting

2011—Tufted hairgrass and silverleaf phacelia

2012—Black chokecherry and Albert penstemon

2013—Mountain brome and silverleaf phacelia

2014—Seed collection for commercial production

2015—Sandberg's bluegrass + seed collection for commercial production

2016—Blue wildrye + seed collection for commercial increase

2017—seed collection two species for commercial production



Seed Transfer Zone Study: bluebunch wheatgrass germination in Coeur d'Alene Nursery greenhouse



Common garden plot--field data collection



Idaho fescue common garden plots: note differences in morphology of different accessions



THANKS!



the end

