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 allopatic 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