Crested Wheatgrass Diversification: PRACTICAL EXPERIENCES

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What is reasonable timeline for success?
Overview

- Plant Material Development
- Site Preparation
- Planting
- Post Planting Weed Control
- Forb planting
Plant Material Development

- Are appropriate species/genetics available for your site?

- Timeline for development include the following:
  - 1-2 years for grasses
  - 2-3 years for forbs

- Can overlap with site prep
Developing Appropriate Genetics

- Begins with a genetically diverse wild collection
Seed Increasing

- Continues with intensive agricultural methods and weed control

Weeding between rows of an established Sandberg’s bluegrass (*Poa secunda*) stand with a chisel plow.

Hand weeding a young Idaho fescue (*Festuca idahoensis*) field
Grass Production

Prairie Junegrass (*Koeleria macrantha*)

Sandberg’s bluegrass (*Poa secunda*)
Arrowleaf balsamroot (*Balsamorhiza sagittata*), Wyeth’s buckwheat (*Eriogonum heracleoides*), Venus Penstemon (*Penstemon venustus*), and Shaggy Fleabane Daisy (*Erigeron pumilis*).
Combining a swathd bluebunch (*Psuedoroegneria spicata*) wheatgrass field

Silvery lupine (*Lupinus argenteus*) hand harvest
Seed Cleaning/Storage

Seed cleaning mill

Seed storage warehouse
Planting Process...

- Site Preparation – Approx 15 months
- Staged Planting – Grasses first, then interseed forbs/shrubs
Site Preparation

- Control of Pre-existing Vegetation
- Seedbank Depletion
- Residue Management
- Seedbed Preparation
Mowing

- Several weeks after mowing

Rotary Blade Mower
Harrowing

- A spring-tine heavy harrow is used
Herbicide Application

- Mid-Spring Heavy Round-Up
- Summer Round-Up/Broadleaf Selective
Seeding occurs in late fall

Rangeland drills help with accurate seed placement
Spring After Planting

- Continue annual broadleaf control through spring and summer
Forb Inter-seeding

- Forbs are drilled the fall after grass seeding
Establishment Success

- Three years post-planting
Long-Term Success
Summary

- Multiple year, aggressive process
- Plant material development takes 2-3 years
- Site preparation and planting takes 3 years
- Planning and funding are not included!!
- Once established, have patience
Questions??