Society for Range Management Annual Meetings, February 2011

Native Plant Materials Development and Application of Management Practices for Repair of Disturbed Landscapes

Plant improvement has historically played as essential role in the repair of disturbed ecosystems. However, the collection, evaluation, and improvement of native plants, and the concomitant development of management strategies is often a long and arduous task. Moreover, although novel native plants have been developed, their successful use in the restoration of disturbed landscapes in suboptimal growing environments is often not been fully realized. Concepts, methods, and issues underlying native plant improvement and development of unique management practices for the repair of such landscapes is not common knowledge among SRM members. This symposium seeks to provide society members with information regarding the development of native plant materials and management practices for repair of disturbed landscapes.

Organizing Committee
Jack Staub (Chair)

Convener
Jack Staub

Program Agenda

8:00-8:20 am
John Englert (NRCS National Plant Materials Leader) – A Historic perspective of native plants for restoration of disturbed landscapes

8:20-8:40 am
Thomas Monaco (Research Ecologist, ARS) and Jeremy James (Research Ecologist, ARS) – The ecology of disturbed ecosystems

8:40-9:00 am
Jeremy James (Research Plant Physiologist, ARS) – Functional traits and their use in plant improvement

9:00-9:20 am
Kevin Jensen (Research Geneticist, ARS) – Breeding strategies for the development native plants

9:20-9:40 am
Steve Larson (Research Geneticist, ARS) – Potential use of molecular markers for development of native plants

9:40-10:00 am
Break

Plant Materials Development of Native Plants

10:00-10:20 am
Thomas Jones (Research Geneticist, ARS) – Artificial selection as a tool to develop plant materials for early-seral applications

10:20-10:40 am
Jack Staub (Research Geneticist, ARS) – Strategies for plant materials development of native species: Thoughts on native forbs

10:40-11:00 am
Blair Waldron (Research Geneticist, ARS) – Breeding strategies for the development of blue bunch wheatgrass for the Great Basin

11:00-11:20 am
Gregory Fenchel (Plant Materials Developer, NRCS) – Plant materials development for disturbed southwestern landscapes

11:20-11:40 am
Michael Peel (Research Geneticist, ARS) – Improvement of seed production in Utah sweetvetch

11:40-12:00 noon
Steve Parr (Plant Materials Developer, NRCS) – Plant materials development in the southern Rocky Mountains

12:00-12:20 pm
Group Discussion

12:20-1:20 pm
Lunch

Production and Management Practices for Use in the Repair of Disturbed Landscapes

1:20-1:40 pm
Mark Stannard (Plant Materials Developer, NRCS) – Thirty-year persistence of 16 plant species in a low precipitation zone

1:40-2:00 pm
Loren St. John (Plant Materials Developer, NRCS) – Seed production of native plants in the intermountain west

2:00-2:20 pm
Blair Waldron (Research Geneticist, ARS) – New forage kochia (Kochia prostrata) cultivars to solve serious problems

2:20-2:40 pm
Christine Taliga (Plant Materials Developer, NRCS) – Potential native species for mitigating fire and weed invasion

2:40-3:00 pm
Jim Jacobs (Plant Materials Developer, NRCS) – Plant materials establishment and performance on gas well pads

3:00-4:00 pm
Group Discussion

4:00 pm
Adjourn

Scientific interchange during the discussion section (afternoon) where thoughts about seed increase, costs for plant materials development, and strategies for the development of improved plant materials were considered.

Dr. Mike Peel addressing the symposium attendees (~80) on the subject of improvement of seed production in Utah sweetvetch.