A Prairie Collaboration

Skinner Native Seeds - John Skinner
Grasslands National Park - Heather Facette
OUTLINE

WHAT SEED PRODUCTION LOOKS LIKE FOR SNS
WHAT REVEGETATION LOOKS LIKE FOR GNP
HOW WE CONNECTED
INITIAL CONTRACT
WHAT WE'VE GROWN
HOW SNS SEED HAS BEEN USED IN THE PARK
WHAT OUR PARTNERSHIP LOOKS LIKE AT PRESENT
OTHER SNS PARTNERSHIPS/OTHER GNP PARTNERSHIPS
Beginnings - Skinner Native Seeds

Big Bluestem. July, 2007. Source: Central Western Manitoba, Central Eastern Saskatchewan
Resources

MORGAN, JOHN. RESTORING CANADA’S NATIVE PRAIRIES

WARK, BRENT, AND POOLE, BILL. REVEGETATING WITH NATIVE GRASSES

SMITH, RAY, JR. AND SMITH STEPHANIE. NATIVE GRASS SEED PRODUCTION MANUAL
Production

“IT TAKES 7 YEARS TO LEARN HOW TO GROW A NEW CROP WELL.”

DR. H. LOEPPKY
1. Seeding
2. Herbicides - Round-up
   - Achieve
   - Curtail
   - Banvel
3. Diseases
4. Harvest
4b. Wild harvest
5. Cleaning
6. Marketing
Seeding Nodding Brome June 2012
Seeding Needle and Thread. June, 2008
Michael Skinner stripping *Stipa spartea* on native prairie
July 2012
Swathing Big Bluestem September 2016
Combining Big Bluestem September 2016
Clipper 27 Air Screen Cleaner
Carter Day Indent Cleaner
Grasslands National Park restoration program.
Four streams of GNP prairie restoration

1. Restoring cultivated fields (660 ha) 1997-2014

2. Reseeding (57 ha in 2006-2007) and restoring areas invaded by invasive species.
Four streams of GNP prairie restoration

3. Noxious species control (leafy spurge and common burdock).

4. Restoring habitat for species at risk (black-tailed prairie dog and greater sage-grouse) (160 ha) 2015-2019
Seeding Process
Seed Species commonly used in GNP restoration.

- Northern Wheatgrass (*Elymus lanceolatus*)
- Western Wheatgrass (*Pascopyrum smithii*)
- June Grass (*Koeleria cristata*)
- Sandberg’s Bluegrass (*Poa sandbergii*)
- Western Porcupine (*Stipa curtiseta*)
- Needle and Thread (*Stipa comata*)
- Green Needle (*Stipa viridula*)
- Blue Grama (*Bouteloua gracilis*)
Challenges of the restoration program
Challenges in acquiring seed.

Thrips

Ergot

Tingey et al. (1972)
Acquisition process:

Selection criteria:

1. Seed must be wild collected or wild collected and grown out seed (no genetic selection i.e. ecovar or cultivar).

2. A current seed certificate must be provided identifying the purity, germination or Tetrazolium Test (TZ) of the seed and be tested according to Canadian Standards.

3. Seed must have a minimum pure live seed (PLS) value of 50%.

4. Seed contaminated with species listed as Prohibited or Noxious in the Saskatchewan Weeds Control Act (2010) will not be accepted.

5. Seed containing Agropyron cristatum (crested wheatgrass), Bromus inermis (smooth brome) and Poa pratensis (Kentucky bluegrass) will not be accepted.
NPSS Annual Conference
1999
PARKS CANADA AGENCY
GRASSLANDS NATIONAL PARK

Annex “A”
Scope of Work

Seed Multiplication Contract
*Bouteloua gracilis* (blue grama grass)
Contract #: SP407-C11-09 / 45309480

1.0 Objective

The objective of this contract is to have a contractor manage and harvest *Bouteloua gracilis* (blue grama grass) grass seed previously supplied by Grasslands National Park.

2.0 Geographic Location

The contractor’s field is located at SW 3-24-28 W in the Municipality of Shellmouth-Boulton (13 miles south and 1 mile east of Roblin, Manitoba).

3.0 Responsibilities

The two parties hereby agree to the following responsibilities surrounding the management, harvesting and sale of *Bouteloua gracilis* (blue grama grass), in the form of seed from the contractor to Grasslands National Park.
Blue Grama August 2016
Needle and Thread, Source: Medicine Lake Wildlife Refuge, Medicine Lake, Montana
Western Wheatgrass June 2013
Skinner Seed in GNP
Successes in restoration

Total GNP restored area = 11 quarter sections or 720 ha
Lessons in Restoration

- Patience
- Manage the perimeter
- Know your seed
- Importance of clean equipment
- Adaptive management
- Partnerships are invaluable
Partnerships and Collaborations
1. Involvement in reclamation projects

2. The challenge of figuring out how to grow something new.
Purple Prairie Clover – July 2010 Source: Northern North Dakota
Big Bluestem. Late August. Source: Central Western Manitoba, Central Eastern Saskatchewan
Other Partnerships