

# 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.

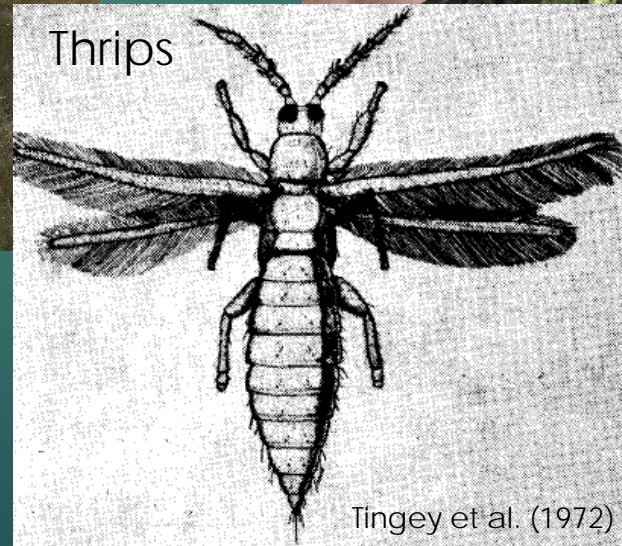
- ▶ Northern Wheatgrass (*Elymus lanceolatus*)
- ▶ Western Wheatgrass (*Pascopyrum smithii*)
- ▶ June Grass (*Koeleria cristata*)
- ▶ Sandberg's Bluegrass (*Poa sandbergii*)
- ▶ Western Porcupine (*Stipa curtiseta*)
- ▶ Needle and Thread (*Stipa comata*)
- ▶ Green Needle (*Stipa viridula*)
- ▶ Blue Grama (*Bouteloua gracilis*)



# Challenges of the restoration program



# Challenges in acquiring seed.



Ergot



# 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



# Initial Contract

PARKS CANADA AGENCY  
GRASSLANDS NATIONAL PARK

Annex "A"  
Scope of Work

Seed Multiplication Contract  
*Bouteloua gracilis* (blue grama grass)  
Contract#: 5P407-C11-09 / 45309450

### 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



**Western Porcupine Grass. June, 2007. Source:  
Grasslands National Park**



# Ecovar Polar Northern Wheatgrass Foundation Plot



Green Needlegrass. July, 2008. Source: Grasslands National Park



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



2001 Restoration Field



# Lessons in Restoration

- ▶ Patience
- ▶ Manage the perimeter
- ▶ Know your seed
- ▶ Importance of clean equipment
- ▶ Adaptive management
- ▶ Partnerships are invaluable



# Partnerships and Collaborations



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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