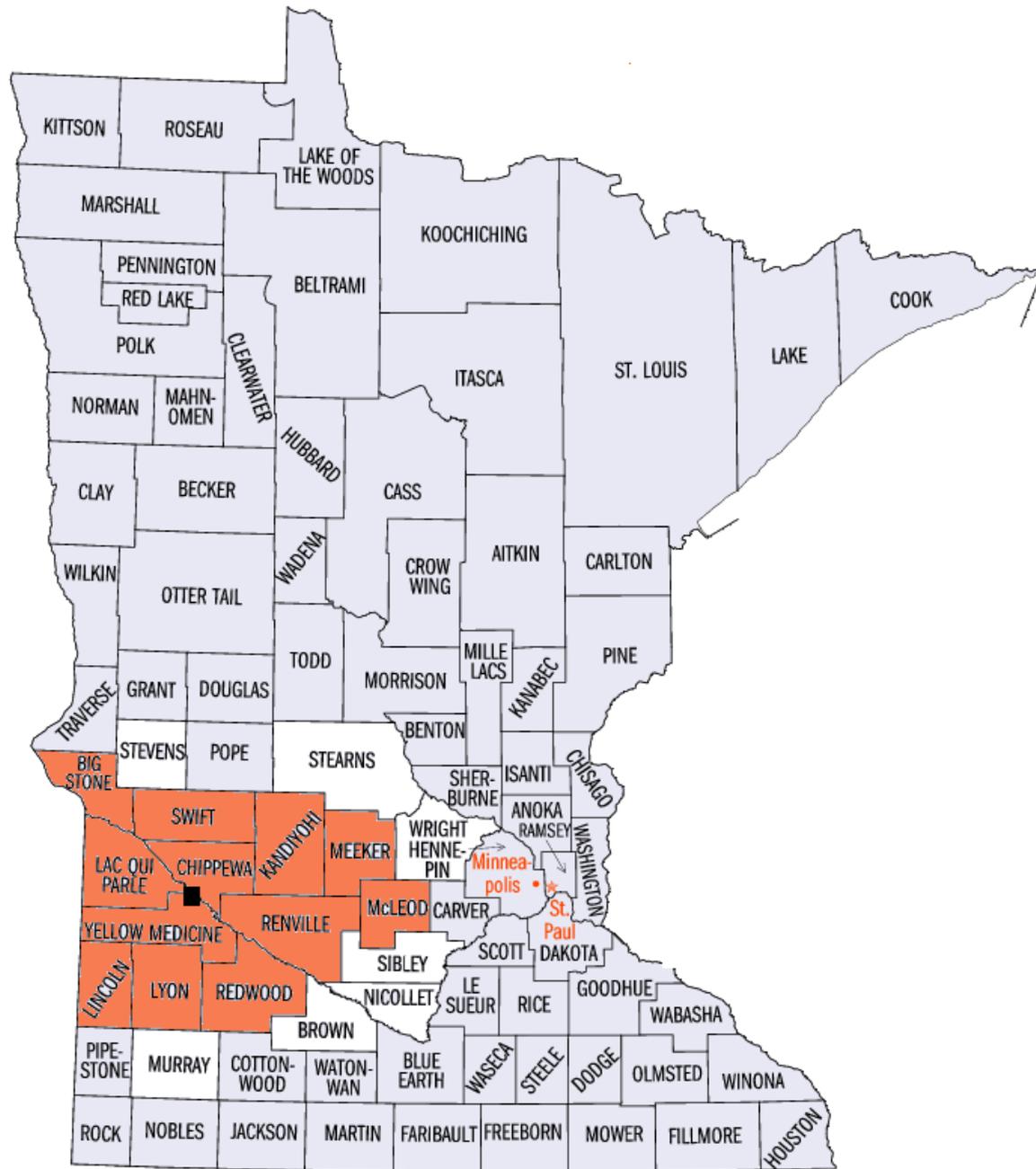


# Establishing Successful Native Grass & Forb Plantings

**Dennis Pederson**  
**Habitat Specialist, Habitat Forever**  
**Montevideo, Minnesota**

# Mission Guidance - 2002

**Get out there,  
do good habitat work, and  
generate enough revenue to  
pay for yourself**



# Product Lines

- Native seed sales
- Prescribed burning
- Seeding installation
- Consultations & technical advice
- Site prep
- Post-seeding management
- Promotion & education

# Customers

- **Private landowners**
- **Agencies – DNR & USEFWS**
- **Other habitat organizations**
- **Watershed districts, counties, municipalities**
- **FSA, NRCS, SWCDs**







02/04/2012 16:51



02/04/2012 16:41



# Establish Grass

- **CRP?**
- **WRP?**
- **RIM?**
- **Other conservation program?**
- **Upland habitat?**

# Establish Grass

*Establishing*  
& Maintaining  
*Quality Native Cover*  
*Key Principles*

A landscape background showing a horizon line with hills and a sky, partially obscured by a dark red banner.

# Establish Grass

*Blind Squirrel Rule*





02/04/2012 16:51





# Establish Grass

*Follow BMPs &  
Principles*

# Establish Grass

## *Disclaimers*

- Ask 10 guys
- West central Minnesota
- Agricultural region
- Available equipment set
- Organizational influence

# Establish Grass

## Principles

- 1 Match soil/moisture conditions**
- 2 Use quality seed**
- 3 Do the prep – don't cut corners**
- 4 Avoid tillage**
- 5 Firm seedbed**
- 6 Use the right equipment**
- 7 Dry ground**

# Establish Grass

## Principles

- 8 1/4" or less
- 9 Drill at 4-6 MPH
- 10 Drill boxes > 1/3 full
- 11 3/4" gentle soaking rain
- 12 Glyphosate
- 13 Mow the dog stuff out of it
- 14 Burn

# Establish Grass

## Prep – Don't Cut Corners

- Brome conversion
- Money down a rathole
- Kill existing vegetation
- Pick rocks
- If tilled .... Black, level, smooth
- And very, very firm

# Establish Grass

## Avoid Tillage

- Plan ahead
- More passes over field add cost
- Introduces weed competition
  
- Chop/rake/bale cornstalks ... or burn
- Cut corn for silage
- Burn & inter-seed

# Establish Grass

## Avoid Tillage – Except ...

- Allelopathy
- Alfalfa! Wheat – probably
- Use tillage to eliminate effect
- And existing grass – more later



02/04/2012 16:51



02/04/2012 16:39



02/04/2012 16:29

# Establish Grass

## Firm Seedbed

- Depth control – ½” rule
- Disk openers have to turn
- If broadcasting, then probably not

# Establish Grass

## Packing

- Bean rollers work, but ....
- 5-6 MPH
- Overlap 50%
- Drive long way in field
- Not behind a drill



# Establish Grass

## Use the Right Equipment

- **Native grass drill**
  - “No till” vs. conventional
- **Broadcast spreader**
- **Brillion pulverizer (packer)**
  - Summers coil packer
  - “Bean rollers” ????
- **Stalk chopper or rotary mower**
  - No forage cutters !!!!!

# Establish Grass

## Seeding With Truax

- **Dry ground**
  - **Broadcast over snow, mud, dry dirt**
- **4-6 MPH**
  - **Broadcast as fast as you can go**
- **Boxes > 1/3 full**





# Establish Grass

## 3/4” Gentle, Soaking Rain

- A landowner responsibility
- Natives don't need much moisture
- Earlier planted the better
- Fall dormant

# Establish Grass

## Glyphosate

- **(Seed into green-up)**
- **Suppress annual grasses & broadleaves**
- **Ideally, 5-7 days post-seeding**
- **1X rate if crop ground**
- **2X rate if inter-seeding**
- **Pre-seeding if necessary**
- **Can't use for fall, dormant**

# Establish Grass

## Mow the Dog Stuff Out of It!!

- When competition reaches 15-18”
- Cut to 6-8”
- Stalk chopper, flail mower, rotary mower
- The wider, the better
- No forage cutters !!!
- Annuals disappear after 1<sup>st</sup> year
- **PLEASE! No broadleaf herbicides!**

# Establish Grass

## Why Mow?

- Sunlight penetration
- “Annual” seed production
- Faster development
- Replace herbicides





# Establish Grass

**If principles are followed,  
natives are pretty much  
foolproof**

**Full disclosure: With good quality seed, actually put in the ground,  
Ma Nature usually wins in the end in any case**

# Establish Grass

## Why Seedings Fail

- Junk seed \*
  - Planted too deep \*
  - Seed not in drill \*
  - Seed not locally adapted \*
  - No weed control (**caveat**) \*
  - Seed mix not as advertised \*
  - Herbicide carryover \*
  - Way bad weed competition
  - Inadequate moisture (**caveat**)
- \* Can all be controlled

# Untilled Bean/Corn Stubble

**In the spring**

**Wait for green-up**

**Conventional native grass drill**

**1 QT glyphosate 5-7 days post**

**Chop/mow twice**

02/04/2012 16:51

# Worked Corn/Bean Ground

Field cultivate in spring

Pack

Wait for green-up

Conventional native grass drill

1 QT glyphosate 5-7 days post

Chop/mow twice

02/04/2012 16:34

# Established Native Grass

How rough is the ground?

Burn late in spring window

Wait for green-up

Conventional native grass drill

2-3 QT glyphosate 5-7 days post

Chop/mow twice

02/04/2012 16:22

# Established Brome Grass

**Brome grass, Canada thistle and  
Pocket Gophers**

02/04/2012 16:41

# Established Brome Grass

**Overkill always works**

**Disk 2X in early August**

**Nuke in Aug/Sep**

**Rip in October**

**Field cult. & pack in spring**

**Seed after green-up**

**1 QT glyphosate 5-7 days post**

02/04/2012 16:41

**Chop/mow twice**

# Establish Grass

## *Plan Ahead*

- Think functionally w/ eye on clock
- Current site condition?
- Prep needed?
- High/dry or low/wet ground?
- WSG mix or forb dominant?
- Active farmer or absentee?
- Tree removal needed?

# Establish Grass

## Spring Vs. Fall

- Forbs flourish with fall seeding
- WSGs like late spring
- Control competition better in spring
- Fall if broadcasting
- Low, wet ground? Seed in fall.
- Current site condition?

# Establish Grass

## Broadcast Vs. Drill

**NRCS standard requires 1.5X seed rate  
for broadcast application**

# Establish Grass

## *Glyphosate – Pre or Post ?*

- What's the objective?
- Suppress competition
- Post gives longer control
  
- Timing management ??
- Weather ??

# Establish Grass

## *Makes Me Crazy*

- Fertilizer
- Herbicides on annual grass/weeds
- Too late/recreational mowing
- “No-till drill”
- Inattentive or no planning
- Whining about tilling old CRP
- Air flow seeding

# Establish Grass

*Landowners  
Should  
Comprehend  
Fully*

# Nelson Wetland Restoration Project

April 21, 2003

Before



# Nelson Wetland Restoration Project

July 21, 2005

After





# Establish Grass

*Questions ??*

# Establish Grass

## *Inter-Seeding Brome*

- Generally does not work well
- Ground too rough to spray
- **Brome does not kill with glyph.**
- Lighter soils
- Early fire
- Frequent FRI

# Establish Grass

## *Diversity Inter-Seeding*

- Ground smooth enuf to spray?
- **Into native grass**
- Burn
- 4-6" green-up
- Seed with native grass drill
- 2X glyphosate 5-7 days post-seeding
- Mow

# Establish Grass

## *Stinger/Milestone Tolerance*

- By degrees
- Better when well-established
- Manage applicators
- Cheap flowers
- Don't use Curtail/Forefront