

NATIVE PLANT ESTABLISHMENT AS A PROCESS

PLANNING, PREPARATION, EXECUTION

TYLER WAYLAND

ROUNDSTONE NATIVE SEED, LLC


ROUNDSTONE
Native Seed
LLC
Upton, KY

















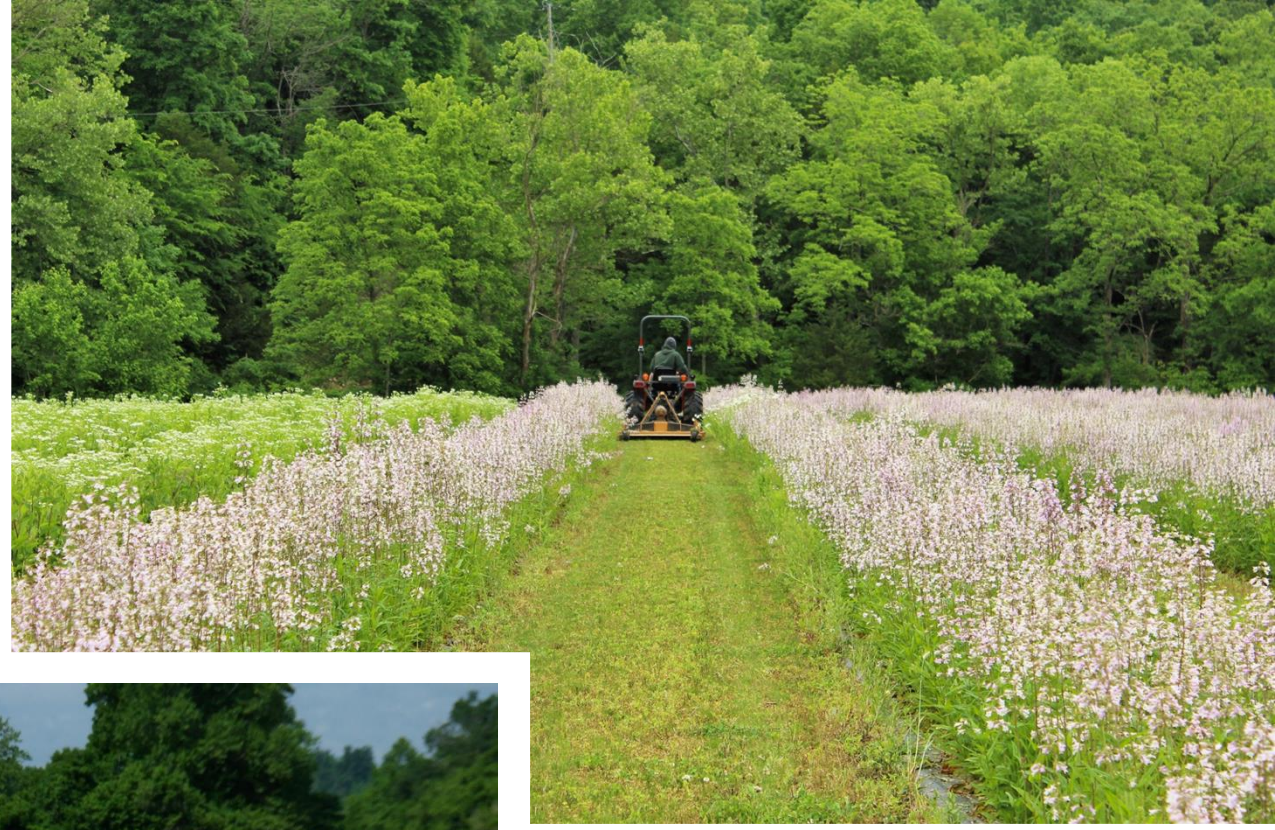
























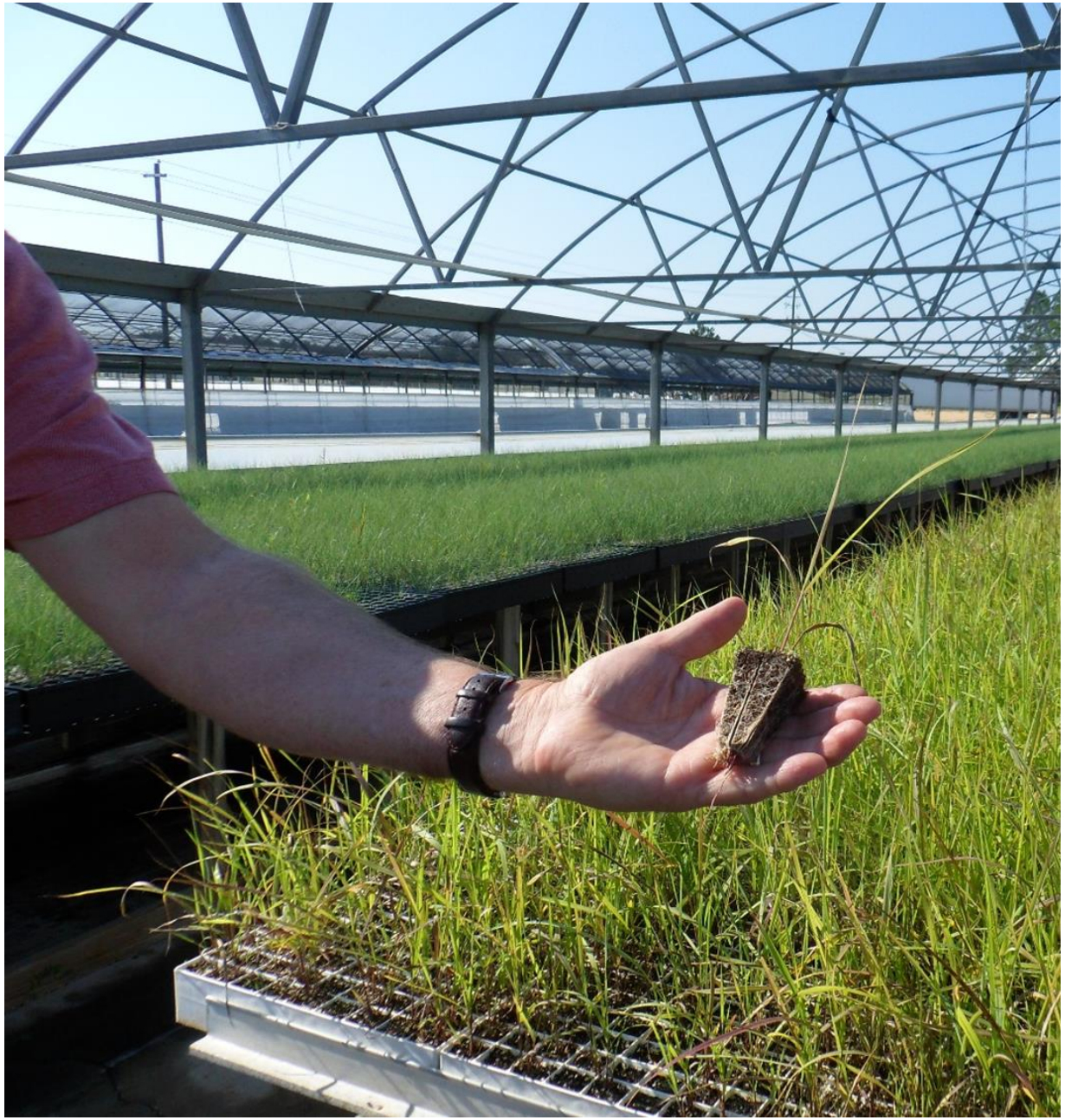
INITIAL SEED COLLECTIONS














14
14
TRANSPORT

ROUNDSTONE
Native Seed
Upton, KY
ROUNDSTONE

4630
FORD






















ROUNDSTONE
Native Seed
Upton, KY


2188








JOHN DEERE
3032 E




Conditioning


Gravity Cleaning


Cleaning by Size,
Shape, and Weight


Separation by Length



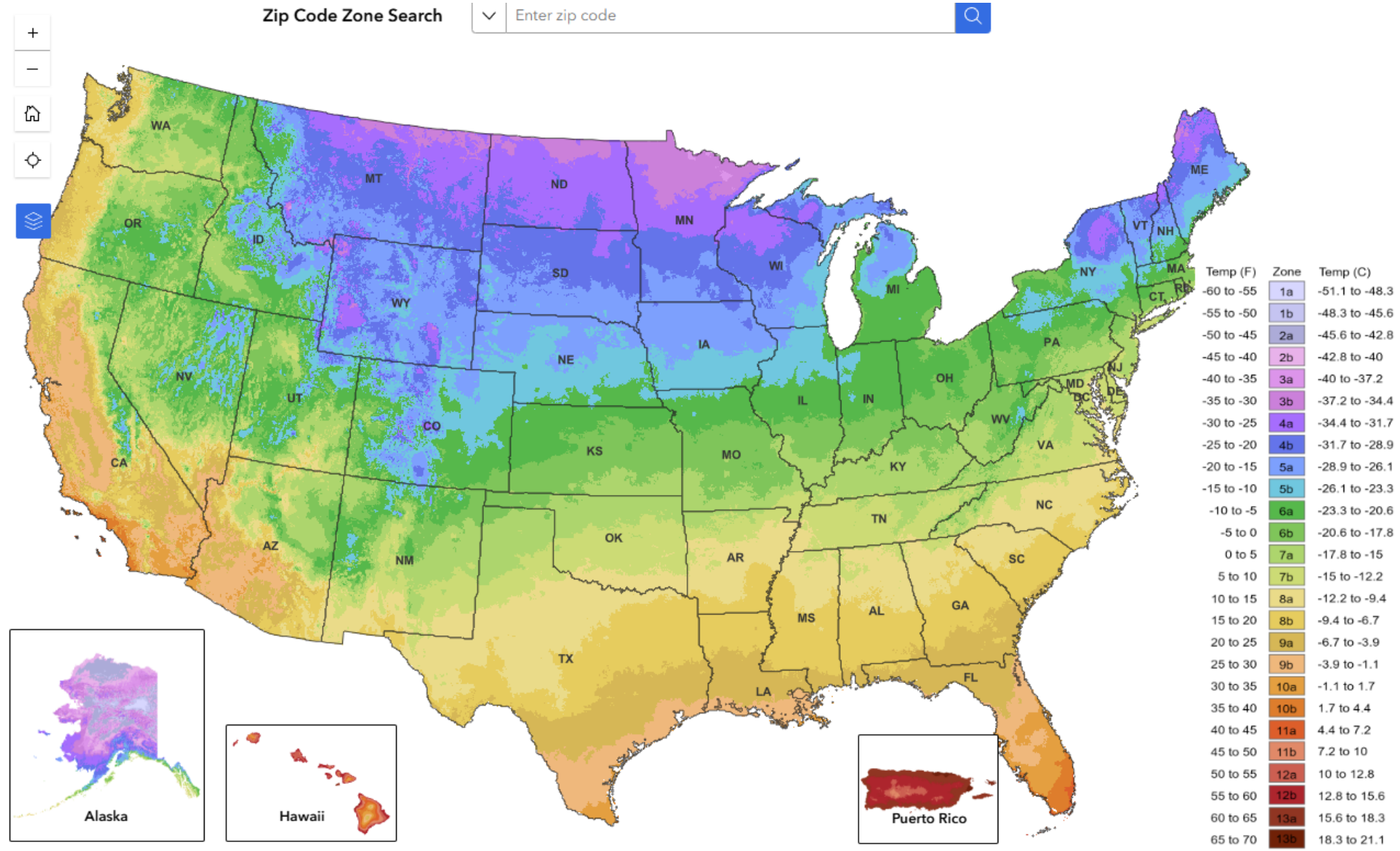

SPICEBUSH


ULINE

FIRST- THE SEED

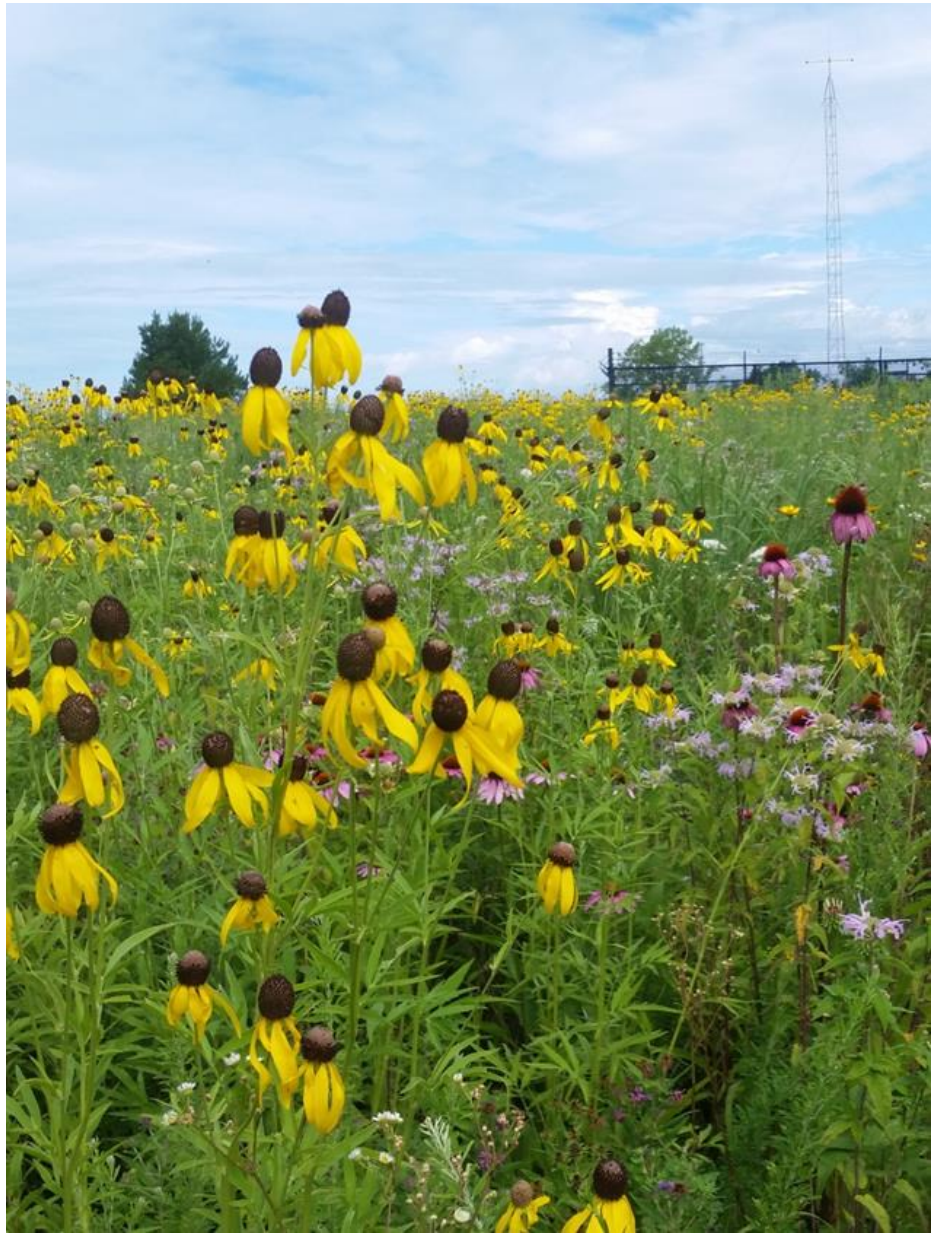





Zip Code Zone Search
Enter zip code
WA
OR
CA
ID
NV
MT
WY
UT
AZ
CO
NM
ND
SD
NE
KS
OK
TX
MN
IA
MO
AR
LA
WI
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MS
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IN
KY
TN
AL
OH
WV
GA
FL
SC
NC
VA
PA
NY
MD
DE
NJ
CT
RI
MA
VT
NH
ME
DC
Alaska
Hawaii
Puerto Rico
Temp (F) Zone Temp (C)
-60 to -55 1a -51.1 to -48.3
-55 to -50 1b -48.3 to -45.6
-50 to -45 2a -45.6 to -42.8
-45 to -40 2b -42.8 to -40
-40 to -35 3a -40 to -37.2
-35 to -30 3b -37.2 to -34.4
-30 to -25 4a -34.4 to -31.7
-25 to -20 4b -31.7 to -28.9
-20 to -15 5a -28.9 to -26.1
-15 to -10 5b -26.1 to -23.3
-10 to -5 6a -23.3 to -20.6
-5 to 0 6b -20.6 to -17.8
0 to 5 7a -17.8 to -15
5 to 10 7b -15 to -12.2
10 to 15 8a -12.2 to -9.4
15 to 20 8b -9.4 to -6.7
20 to 25 9a -6.7 to -3.9
25 to 30 9b -3.9 to -1.1
30 to 35 10a -1.1 to 1.7
35 to 40 10b 1.7 to 4.4
40 to 45 11a 4.4 to 7.2
45 to 50 11b 7.2 to 10
50 to 55 12a 10 to 12.8
55 to 60 12b 12.8 to 15.6
60 to 65 13a 15.6 to 18.3
65 to 70 13b 18.3 to 21.1
Sources: Esri; U.S. Department of Commerce, Census Bureau; U.S. Department of Commerce (DOC), National Oceanic and Atmospheric Administration (NOAA), National Ocean Service (NOS), National Geodetic Su…
Powered by Esri

THE PROCESS

- Identify Objectives and Develop a Plan
- Site Preparation
- Seed Selection
- Application/Planting
- Post Planting Maintenance
- Manage Expectations



SITE PREPARATION






SEARS TREE SERVICE LLC
LAND CLEARING
270-755-2058
WWW.SEARSTREESERVICE.COM

WHAT MAKES US UNSUCCESSFUL?

#1 - WEED COMPETITION!!

2- WRONG PLANTING DEPTH

#3 - IMPROPER GROUND PREPARATION

#4 - IMPROPER HERBICIDE APPLICATION OR TIMING

THE 7-STEP PROCESS

Starting a full season in advance:

1) 1st herbicide application starts in late spring of year prior to planting
2) 2nd herbicide is applied in the summer
3) 3rd herbicide is applied late summer/early fall
4) Sow a cover crop in the fall at a light rate to hold the soil through the winter (As-Needed)
5) 4th herbicide is applied in late spring of the planting year
6) 5th herbicide is applied in the summer prior to planting
7) Installation of the native seed mix using no-till, native seed drill after herbicide safe date



Prior to 1st Herbicide Application

May 15, 2025



4 Days Post 1st Herbicide Application



1 Week Post 1st Herbicide Application


2.5 Weeks Post 1st Herbicide Application


3.5 Weeks Post 1st Herbicide Application


6 Weeks Post 1st Herbicide Application
2nd Herbicide Application Conducted
June 28, 2025


2.5 Weeks Post 2nd Herbicide Application




3 Weeks Post 2nd Herbicide Application


4 Weeks Post 2nd Herbicide Application


6 Weeks Post 2nd Herbicide Application
3rd Herbicide Application Conducted
August 8, 2025


4 Weeks Post 3rd Herbicide Application
September 9th, 2025


5 Weeks Post 3rd Herbicide Application
September 20th, 2025


Day 5 Oats
September 23th, 2025



Drilled Oats
(Day 7 of Broadcasted Oats)
September 27th, 2025



Broadcasted and Drilled Oats
September 29th, 2025



Broadcasted and Drilled Oats
October 8th, 2025



Broadcasted and Drilled Oats
November 1, 2025



Broadcasted and Drilled Oats
December 28, 2025



Broadcasted and Drilled Oats
January 1, 2026



Broadcasted and Drilled Oats
January 26, 2026



Broadcasted and Drilled Oats
February 15, 2026



Broadcasted and Drilled Oats
March 21, 2026



Broadcasted and Drilled Oats
April 12, 2026


Herbicide Treatment to Terminate Oats
April 17, 2026


6 Days Post Hericide Application
April 23, 2026


2 Weeks Post Herbicide Application
May 1, 2026


3 Weeks Post Herbicide Application
May 9, 2026



4.5 Weeks Post Herbicide Application
May 19, 2026


6 Weeks Post Herbicide Application
May 29, 2026

A SUMMER START

- 1ST HERBICIDE IN THE SUMMER (YEAR 1)
- 2ND HERBICIDE IN FALL (YEAR 1)
- COVER CROP IF NEEDED OVER WINTER (YEAR 1 INTO YEAR 2)
- 3RD HERBICIDE IN EARLY SPRING (YEAR 2)
- 4TH HERBICIDE IN LATE SPRING EARLY SUMMER (YEAR 2)
- PLANT (YEAR 2)

STARTING IN THE FALL

- 1ST HERBICIDE IN THE FALL (YEAR 1)
- COVER CROP IF NEEDED OVER WINTER (YEAR 1 INTO YEAR 2)
- 2ND HERBICIDE IN EARLY SPRING (YEAR 2)
- 3RD HERBICIDE IN LATE SPRING/EARLY SUMMER (YEAR 2)
- PLANT (YEAR 2)

A WINTER START

- CONVENTIONAL TILL THE AREA LATE FALL/EARLY WINTER
- PLANT COVER CROP, IF NEEDED
- 1ST HERBICIDE IN EARLY SPRING
- 2ND HERBICIDE IN LATE SPRING/EARLY SUMMER
- NO-TILL DRILL PLANT NO SOONER THAN 2 WEEKS AFTER THE 2ND SPRAY

SEED SELECTION

DESIGN CONSIDERATIONS FOR MIXES

- MIMIC NATURE
- HABITAT
- POLLINATORS
- EROSION CONTROL
- MITIGATION
- FORAGE



SEED MIX CONSIDERATIONS

- NUMBER OF SEEDS PER POUND
- NUMBER OF SEEDS PER SQUARE FOOT
- LIKELIHOOD OF SEEDS TO GERMINATE DUE TO SIZE
- SIZE OF PLANT AT MATURITY
- AGGRESSIVENESS OF PLANTS
- DORMANCY
- LONGEVITY



PURE LIVE SEED(PLS) = PURITY X GERMINATION





THINNER PLANTINGS
FOR WILDLIFE



DENSER FOR
HABITAT AND
GROUND COVER



VERY DENSE FOR HEAVY
EROSION CONTROL





NURSE CROPS

- SPRING: OATS
- SUMMER: BROWNTOP MILLET
- FALL: OATS

BE CAREFUL OF RATES!
DO NOT SEED TOO HEAVY

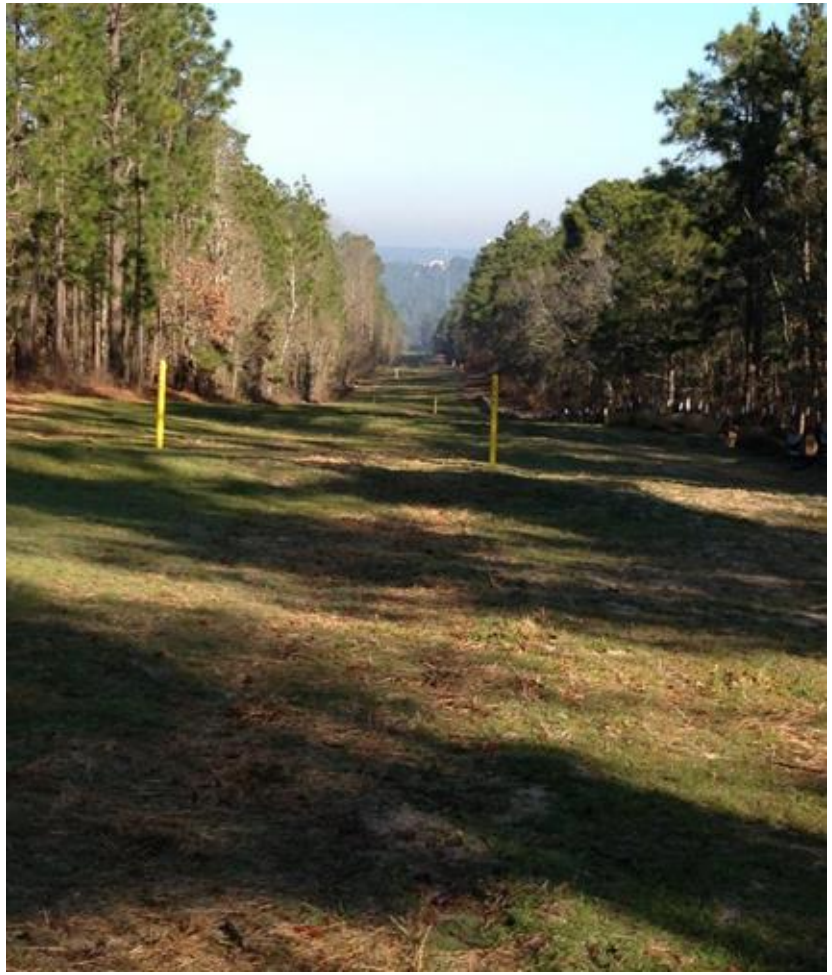






NURSE CROPS HELP HOLD SOIL WHILE NATIVES ESTABLISH







APPLICATION/PLANTING

NO-TILL PLANTING

PLANTING AND GROWING CROPS FROM YEAR TO YEAR WITHOUT DISTURBING THE SOIL THROUGH TILLAGE

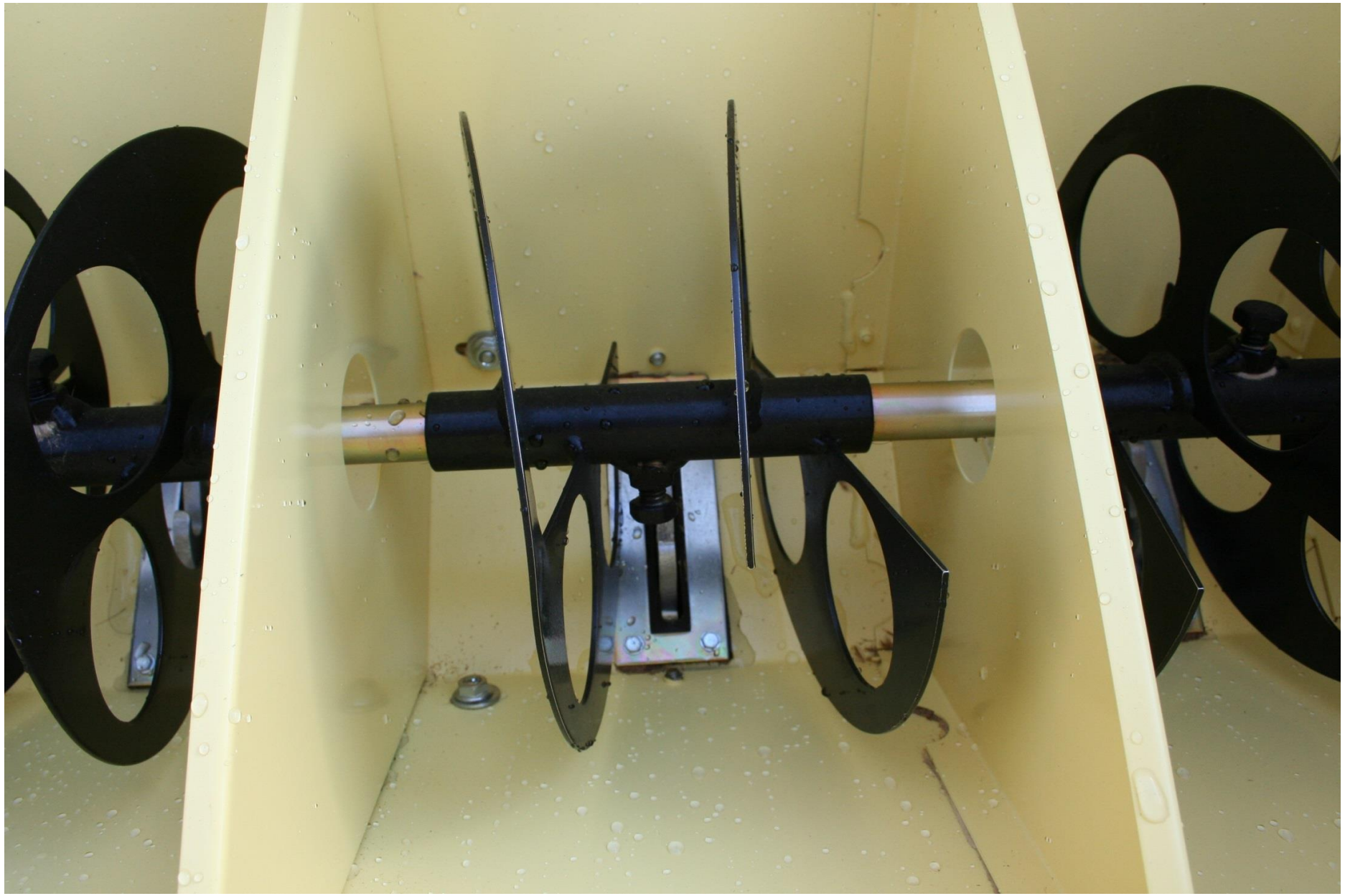




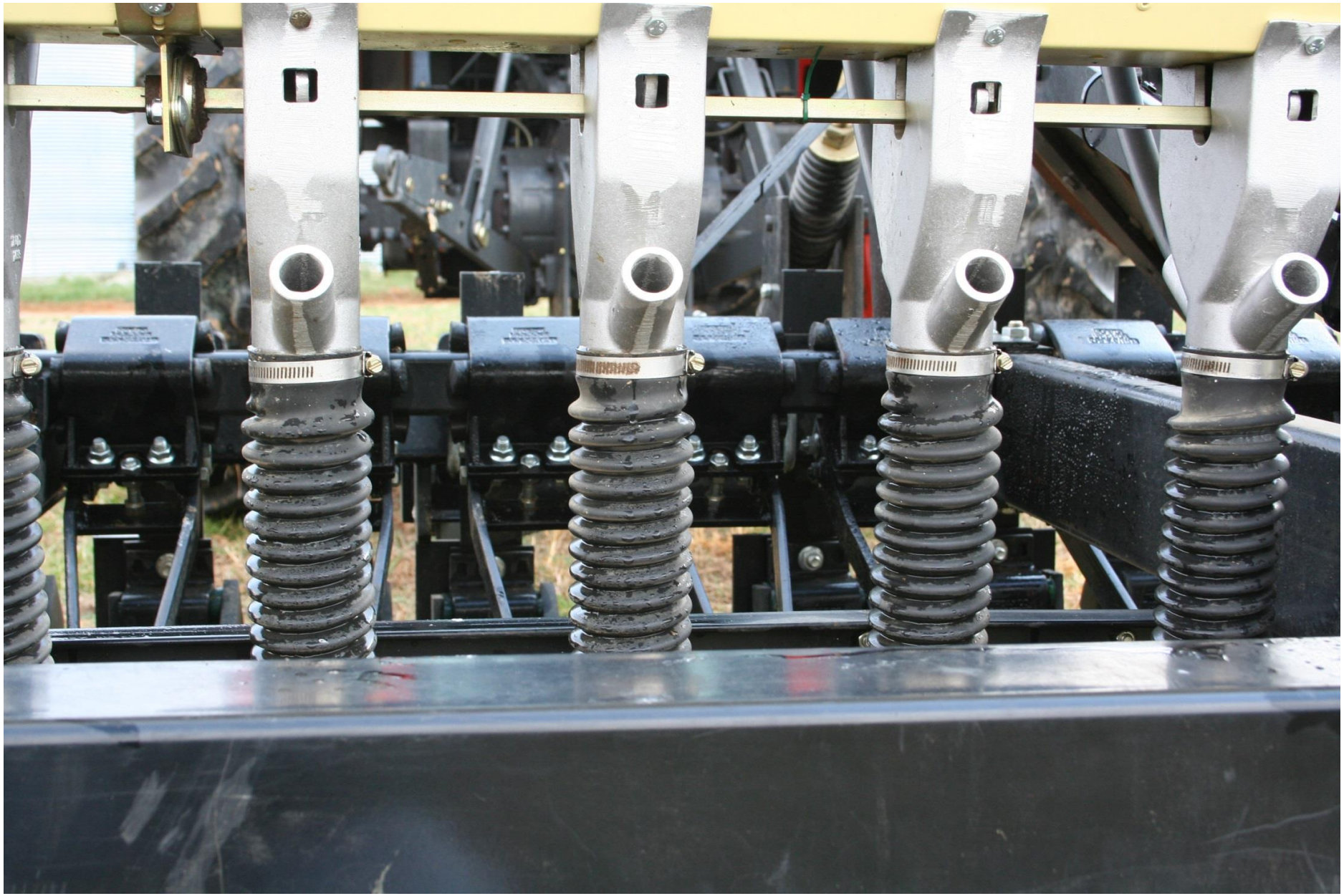








FLUFFY SEED BOX



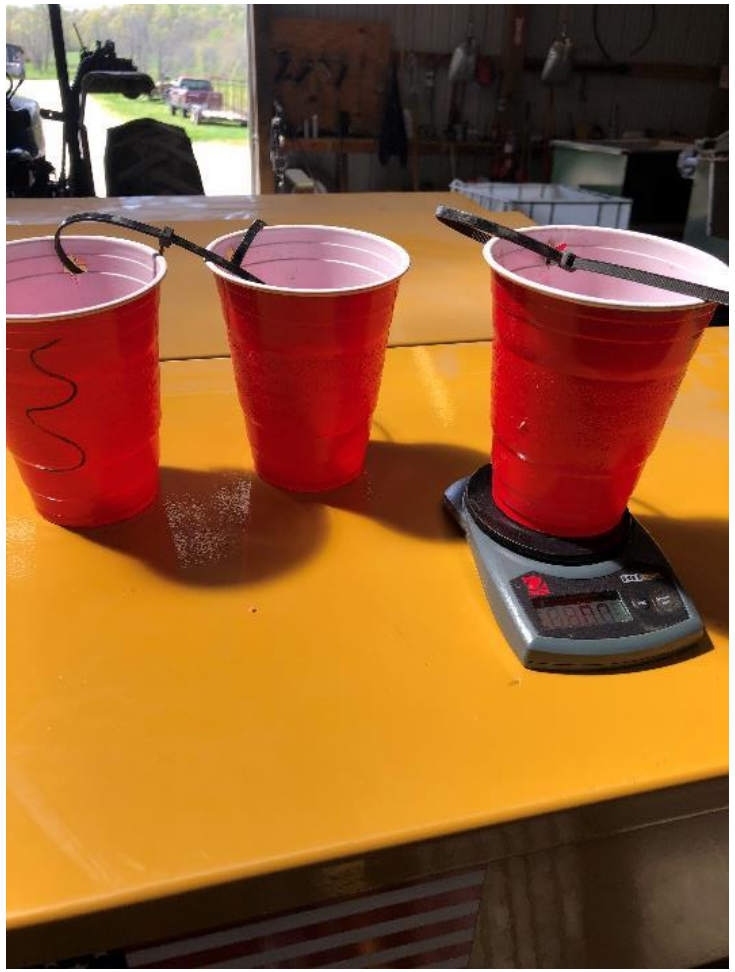
OVER-SIZED HOSES



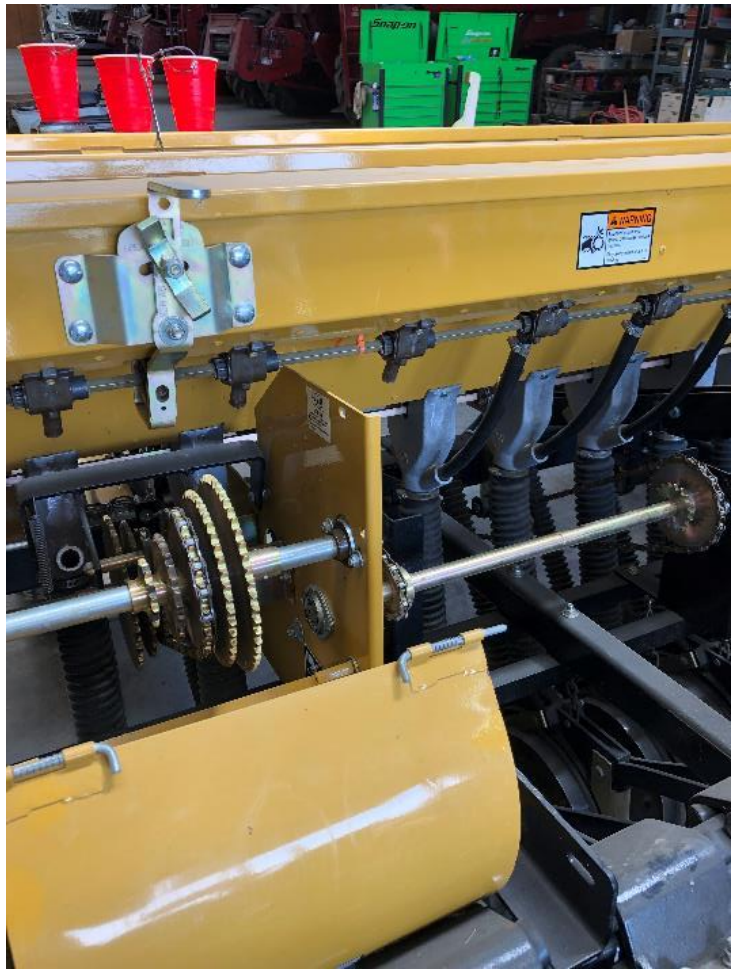
TRASH PLOWS


PACKING WHEEL
DOUBLE DISK OPENER

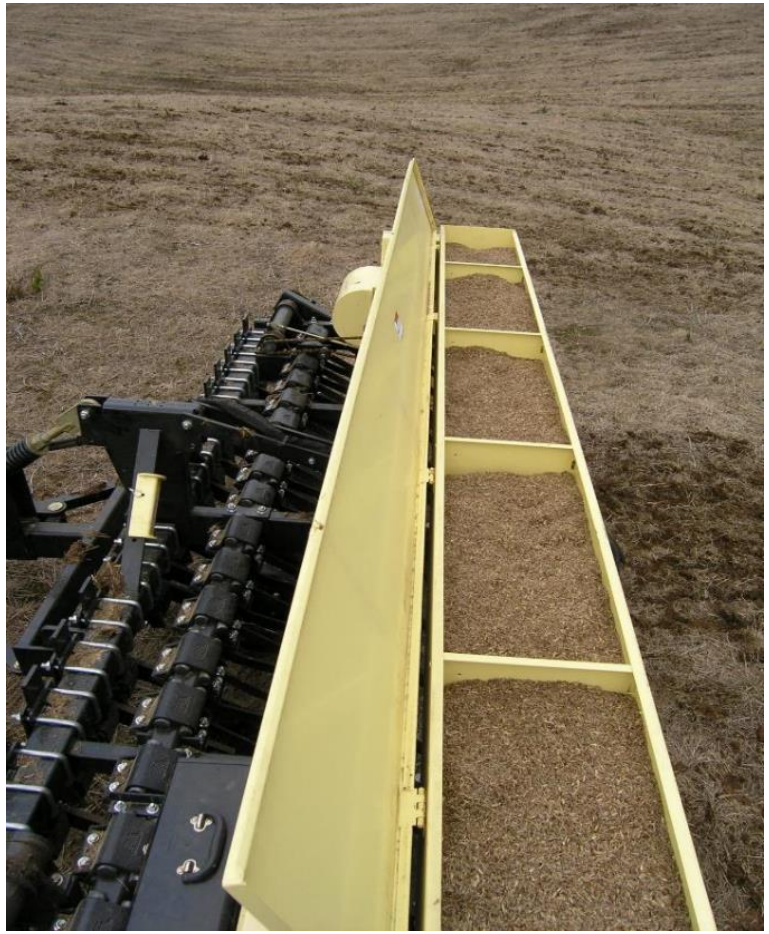
PROPER CALIBRATION IS ESSENTIAL







DO NOT OVERFILL BOXES



DO NOT LET BOXES GET DOWN BELOW 1/3





GROUND SPEED



PLANTING DEPTH IS CRITICAL
NO DEEPER THAN ¼"

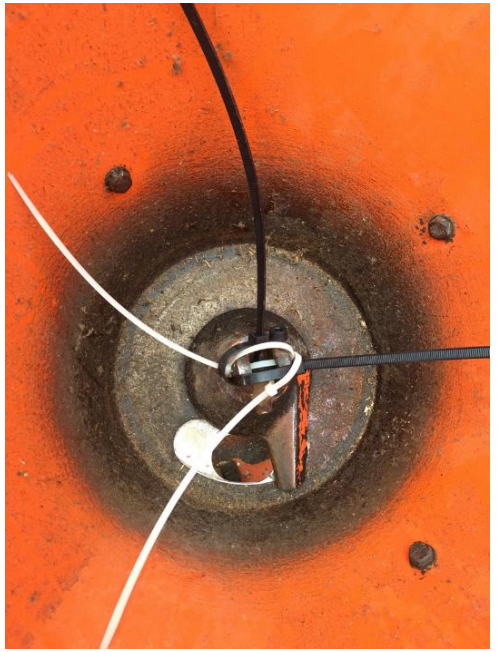


PLANTING DEPTH IS CRITICAL
NO DEEPER THAN ¼″

BROADCAST SEEDING METHODS





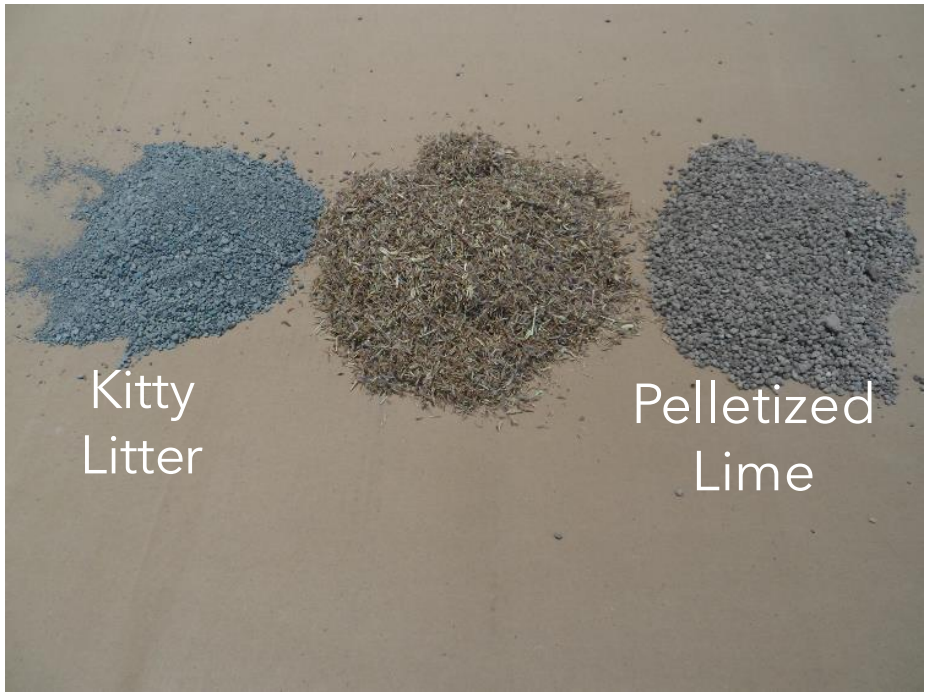






USE OF CARRIERS











HYDROSEEDING





POST PLANTING MAINTENANCE

TOP CLIP OR BUSHHOGGING IN THE FIRST YEAR OF ESTABLISHMENT CAN GREATLY INCREASE THE SUCCESS OF YOUR PLANTINGS







THIS MAY BE PERFORMED SEVERAL TIMES PER YEAR AS LONG AS WE STAY ABOVE THE SEEDLINGS AS THEY GROW.

DO NOT WAIT TOO LATE TO TOP CLIP



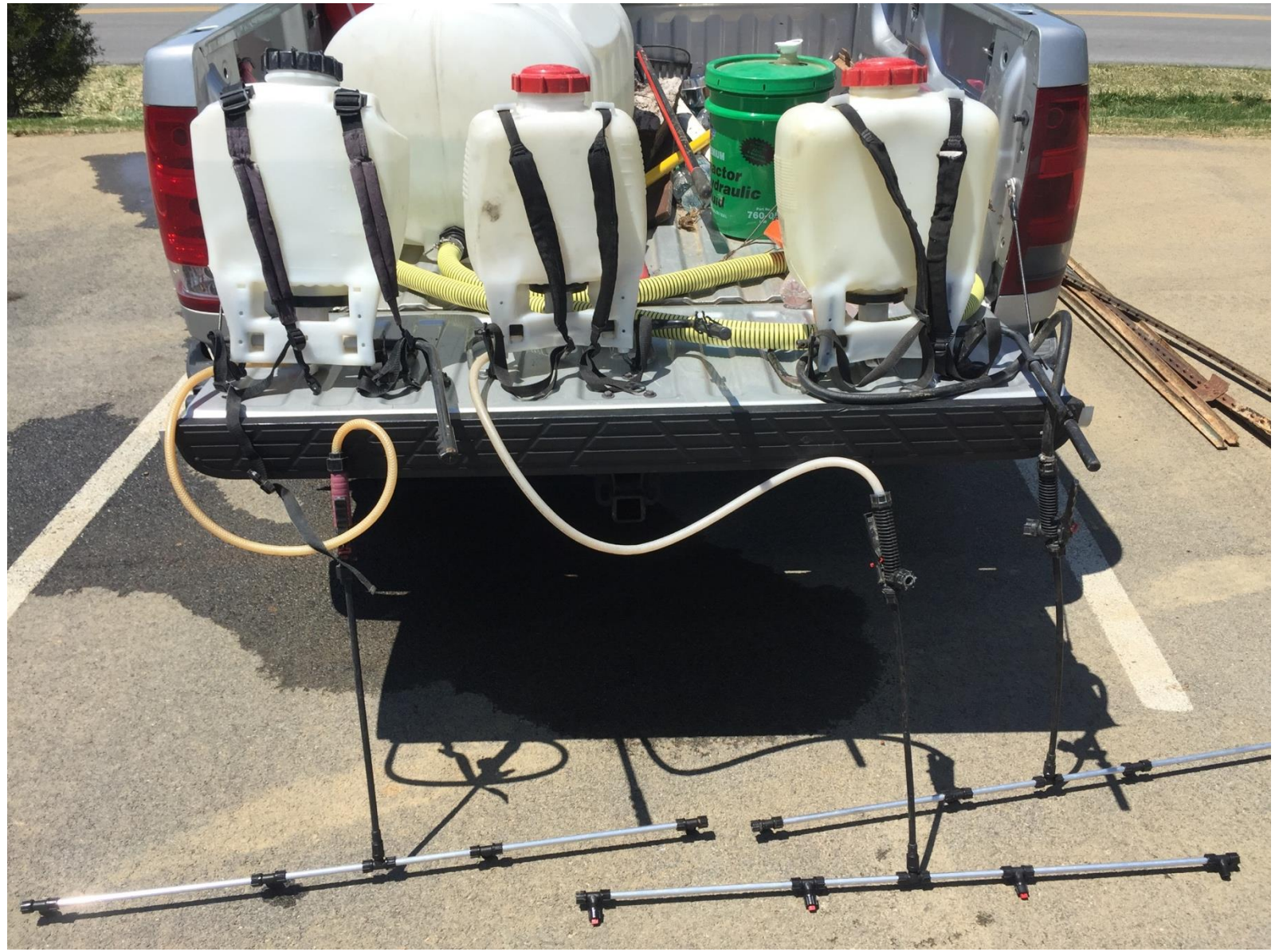




POST PLANTING HERBICIDE MAINTENANCE

- FOR POLLINATOR PLANTINGS WE CAN SPRAY GRASS SPECIFIC HERBICIDES TO TAKE OUT UNWANTED GRASS WEEDS WITHOUT HURTING OUR POLLINATOR PLANTS.
- USE IMAZAPIC HERBICIDE FOR CONTROL OF SOME GRASS AND BROADLEAF WEEDS IN IMAZAPIC TOLERANT POLLINATOR MIXES.
- GLYPHOSATE CAN BE USED FOR SOME DORMANT SPRAYS.
- WICKING IS ALSO A VALUABLE METHOD


CHAPIN




FRAGILE
HANDLE
WITH CARE
FRAGILE
HANDLE
WITH CARE






ROUNDSTONE
Native Seed
Upton, KY



MANAGE EXPECTATIONS


WATCH IT GROW!
The plants growing at the lake's edge make up a wetland that filters water flowing into the lake. As these plants grow, they will help keep the lake clean and healthy.
Help us keep these important plants healthy by staying on the designated walking paths.
Thanks!
SHELBY FARMS PARK


POLLINATOR
HABITAT
ZONE


First Year Growth


Second Year Growth


Third Year Growth


First Year Growth

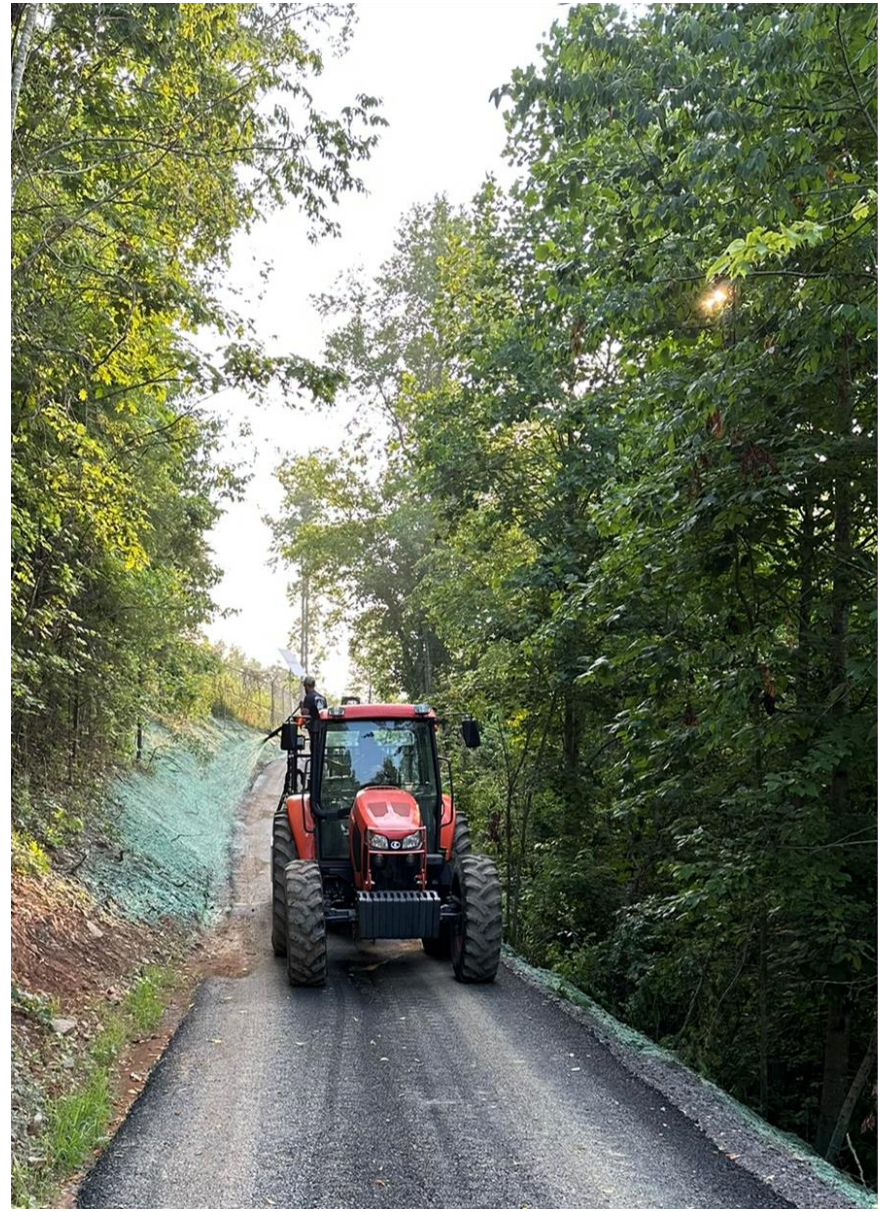

Beginning of Second Year Growth

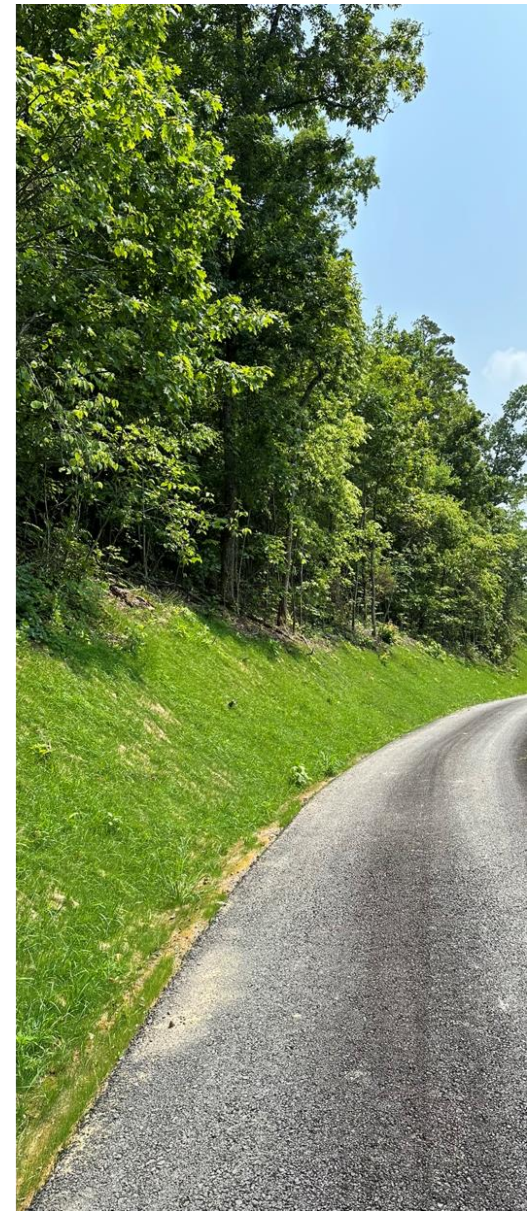

End of Second Year Growth







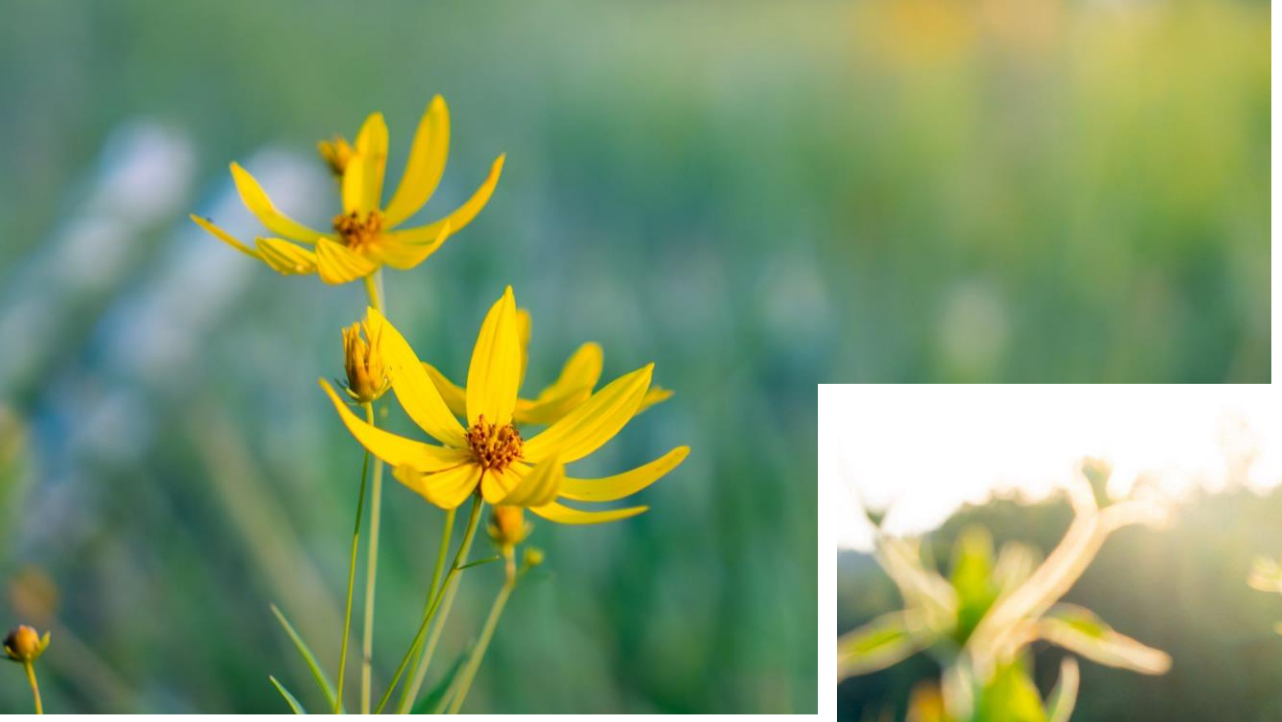
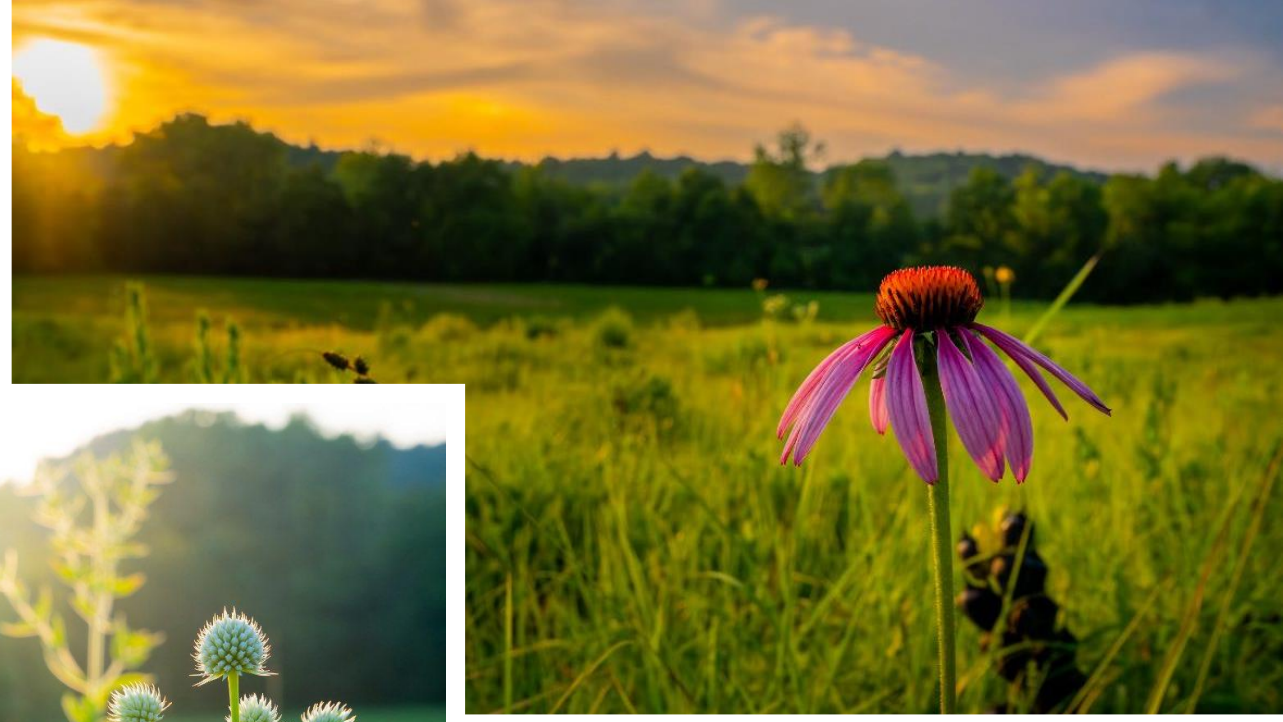
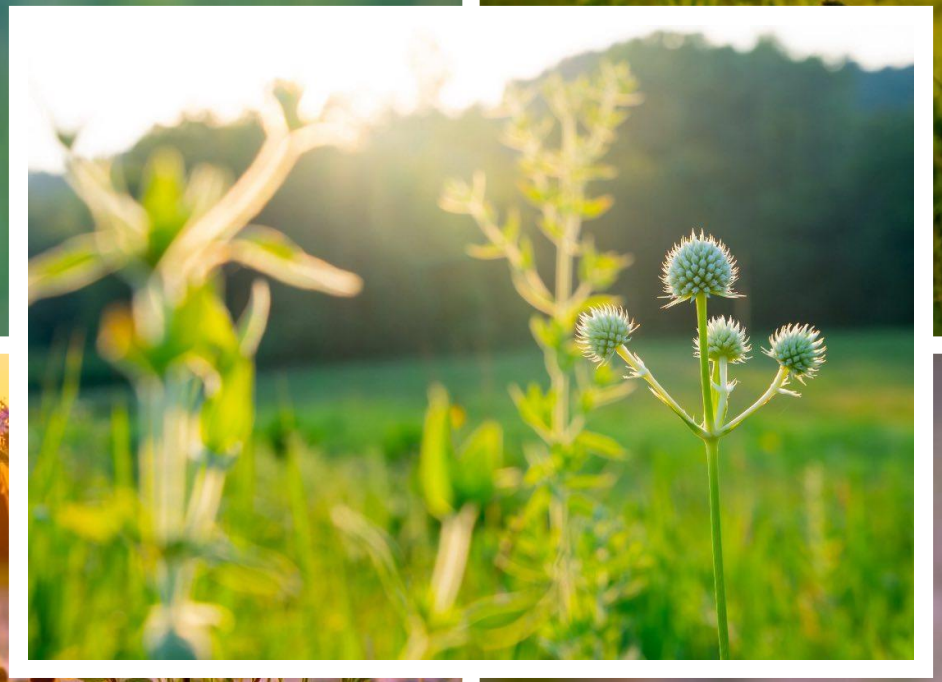


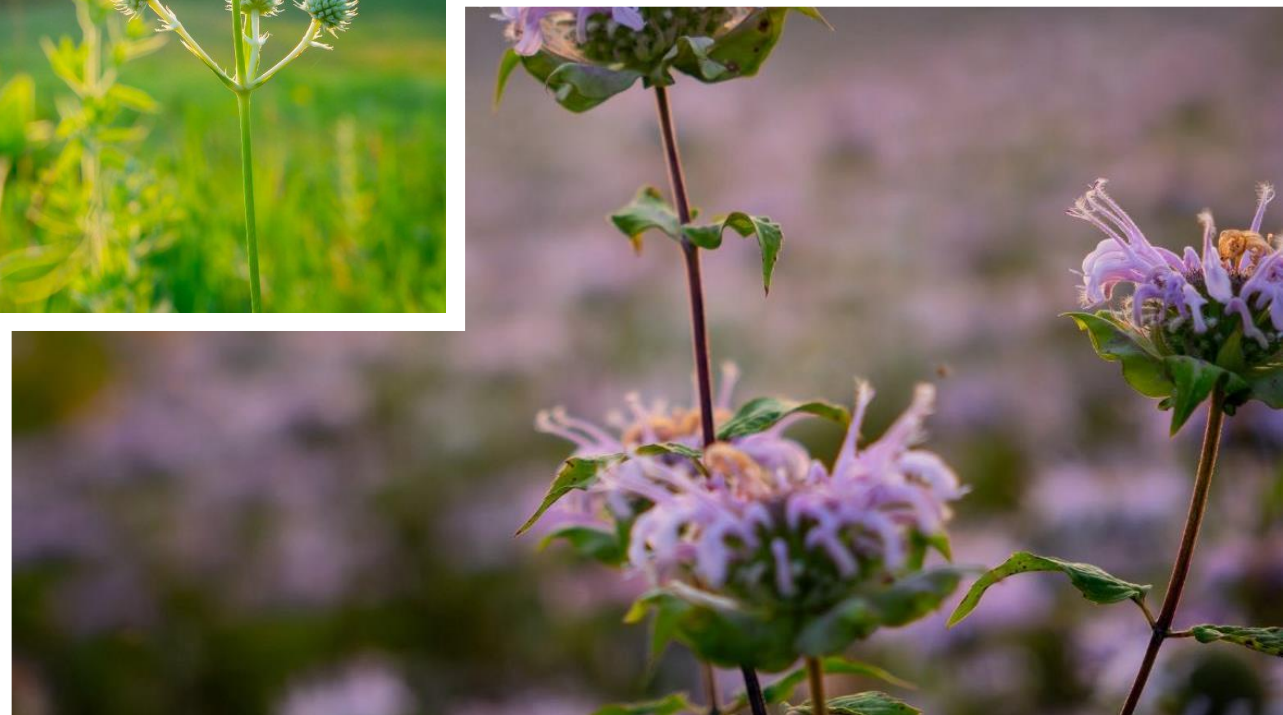















LG&E KU
PPL companies
Pollinator Habitat







THANK YOU!



www.roundstoneseed.com

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