

Planting #129

2018 Planting History

Prepared by Avery Parmiter

Name: Bishop South

26 Acres Total

Transline R (herbicide resistant): 26 Acres

Wetland: ~1.5 Acres

Site Conditions

General Location – located south of Flagg Rd., about 1/3 of a mile from the intersection of E. Flagg and Lowden Rd.

GPS: 41°54'41"N, 89°20'01"W

Elevation: 735 ft – 765 ft

County: Ogle

Soil Types

According to the Web Soil Survey for the planting area, soil types include:

Soil Type	Acres in AOI	Percent of AOI
Warsaw loam, 2 to 5 percent slopes	0.6	2.3%
Jasper loam, 0 to 2 percent slopes	2.2	8.4%
Odell silt loam, 0 to 2 percent slopes	0.2	0.6%
Senachwine silt loam, 5 to 10 percent slopes, eroded	6.1	23.6%
Wyanet silt loam, 5 to 10 percent slopes, eroded	16.9	65.1%
Totals for Area of Interest	26.0	100.0%

Figure 1: Soil types present within the planting. Source: NRCS.

*Above are basic descriptions, a complete soil test is needed to determine specific soil characteristics. For additional information, see Soil Web Survey website: <http://websoilsurvey.nrcs.usda.gov/app/>

Refer to Figure 2 that shows the location of the soil types within the planting.

Topography

The general topography of the planting consists of a few rolling hilltops and a drainage area that is in the early stages of being restored to a wetland. A berm (or dike) was created in the SW area of the planting. There is an average slope of 4.1% and a maximum slope of 10%.

Agricultural History

This site has been in agriculture for years and was in corn before the crew planting.

Site Preparations

The corn was harvested in mid-October and then mowed in November, but not burned. Since this planting is predicted to have weed problems, the seed mix consists of species that are resistant to the herbicide Transline. This way, the whole area can potentially be boom sprayed without killing species that are not Transline resistant. The weather for the 2018 season was average, not usually wet or dry; however, we received about a foot of snow a week before starting the planting in early December.

Planting the Seed

Weather: The winds were variable from 5 to 10 mph. It stayed dry during planting and was cloudy or partly cloudy. The snow was mostly melted by the time we began planting, but there were some snow drifts that were large enough to get the vehicles stuck. We avoided driving over these areas after getting stuck a few times and tossed out the seed by hand over the drifts.

The area was seeded using three broadcast seeders attached to blue truck and two blue UTV's. The crew members who participated in planting were Avery Parmiter, Nathaniel Weickert, Tyler Pellegrini, Karey O'Brien, and Leah Kleiman.

Transline R Seed Mix

A total of 26.0 acres were planted using the Transline-resistant seed mix. It was planted with north-south transects, as well as east-west transects using the rows of corn as a guide. Each seeder was filled with two barrels of seed at a time and then refilled. This took a little over two days to plant. We planted this mix at 66.35 pounds per acre, which equaled a total of 1,725.25 pounds of Transline R seed planted.

Wetland Seed Mix

The wetland seed that we collected was originally going to be planted into other areas that needed over-seeding, but after this wetland was created we could put all of our seed mix in this year's planting. Because of this, the pounds per acre was heavy. It was 131.36 pounds per acre, which equaled a total of 197.034 pounds of wetland seed planted.

Canada Rye border

Canada Rye was planted around the border of the planting, from the outer edge to about 20 feet into the planting. We put down five barrels, which equaled about 100 pounds of Canada Rye.

Woodland Seed Mx

There is a woodland area along the SE border of the planting. This area is being treated (i.e. basal barked) for invasive plants, such as Multiflora Rose and Japanese honeysuckle, and could possibly be planted at some point in the future.

Seed List

SCIENTIFIC NAME	COMMON NAME	lbs/acre	Transline R Total lbs	lbs/acre	Wet Total lbs
<i>Agalinis tenuifolia</i>	Slender False Foxglove	0.000		0.305	0.855
<i>Agrimonia parviflora</i>	Swamp agrimony	0.000		0.019	0.052
<i>Alisma subcordatum</i>	Water Plantain	0.000		0.432	1.209
<i>Allium cernuum</i>	Nodding onion	0.159	4.459	0.000	
<i>Amorpha fruticosa</i>	Indigo Bush	0.000		0.007	0.019
<i>Anemone canadensis</i>	Meadow anemone	0.000		0.075	0.211
<i>Anemone cylindrica</i>	Thimbleweed	0.468	13.099	0.000	
<i>Anemone virginianum</i>	Tall thimble weed	0.304	8.500	0.000	
<i>Angelica atropurpurea</i>	Great Angelica	0.000		0.393	1.100
<i>Apocynum cannabinum</i>	Dogbane	0.000		0.114	0.319
<i>Aristida longiseta</i>	3 awn grass	0.057	1.609	0.000	
<i>Arnoglossum atriplicifolia</i>	Pale Indian Plantain	0.505	14.150	0.000	
<i>Arnoglossum plantaginea</i> (<i>tuberosa</i>)	Prairie Indian Plantain	0.000		0.714	2.000
<i>Aronia (Pyrus) prunifolia</i>	Black Chokeberry	0.000		0.025	0.071
<i>Asclepias incarnata</i>	Swamp Milkweed	0.000		0.026	0.073
<i>Asclepias syriaca</i>	common milkweed	0.024	0.676	0.000	
<i>Baptisia alba (leucantha)</i>	White wild indigo	4.429	124.000	0.000	
<i>Bidens comosa</i>	Swamp bidens	0.000		0.011	0.031
<i>Boltonia asteroides</i>	False aster	0.000		4.953	13.869
<i>Bouteloua curtipendula</i>	Side oats	0.118	3.300	0.000	
<i>Bromus kalmii</i>	Prairie brome	0.445	12.450	0.000	
<i>Calamagrostis canadensis</i>	Blue joint grass	0.000		2.946	8.250
<i>Caltha palustris</i>	Marsh Marigold	0.000		0.112	0.313
<i>Carex bicknellii</i>	Bicknells sedge	0.071	2.000	0.000	
<i>Carex hystericina</i>	Bottlebrush sedge	0.000		0.810	2.269
<i>Carex muhlenbergii (enervis)</i>	Muhlenberg's sedge	0.004	0.125	0.000	
<i>Carex vulpinoides</i>	Common Fox Sedge	0.000		1.254	3.510
<i>Carex utriculata</i>	Common yellow lake sedge	0.000		0.035	0.097
<i>Cephalanthus occidentalis</i>	Buttonbush	0.000		0.039	0.110
<i>Chamerion angustifolium</i>	Fireweed	0.000		0.218	0.610
<i>Chelone glabra</i>	Turtlehead	0.000		0.150	0.420
<i>Coreopsis tripteris</i>	Tall Coreopsis	0.588	16.450	0.000	
<i>Cuscuta campestris</i>	Field Dodder	0.000		0.003	0.008
<i>Dalea candidum</i>	White prairie clover	2.129	59.610	0.000	
<i>Dalea purpureum</i>	Purple prairie clover	1.861	52.100	0.000	
<i>Danthonia spicata</i>	Poverty oats	0.018	0.509	0.000	
<i>Doellengeria umbellata</i>	Flat Top Aster	0.000		0.042	0.117

<i>Echinacea pallida</i>	Pale purple coneflower	7.442	208.380	0.000	
<i>Echinocystis lobata</i>	Wild (Burr) Cucumber	0.000		0.003	0.009
<i>Eleocharis obtusa</i>	Blunt spikerush	0.000		0.003	0.009
<i>Eragrostis spectabilis</i>	Purple love grass	0.017	0.476	0.000	
<i>Erectites heiracifolia</i>	Fireweed	0.000		0.002	0.005
<i>Eryngium yuccifolium</i>	Rattlesnake master	1.532	42.900	0.000	
<i>Eupatorium altissimum</i>	Tall Boneset	0.018	0.493	0.000	
<i>Eupatorium perfoliatum</i>	Common Boneset	0.000		0.343	0.959
<i>Eutrochium maculatum</i> (<i>Eupatorium</i>)	Spotted Joe-pyeweed	0.000		5.554	15.550
<i>Epilobium coloratum</i>	Cinnamon willow Herb	0.000		0.343	0.959
<i>Galium Boreale</i>	Northern Bedstraw	0.000		0.523	1.465
<i>Gentiana (Gentianopsis) crinita</i>	Fringed Gentian	0.000		0.039	0.110
<i>Gentiana andrewsii</i>	Bottle Gentian	0.000		1.057	2.960
<i>Hasteola suaveolens</i>	Sweet Indian Plantain	0.000		4.021	11.260
<i>Helenium autumnale</i>	Sneezeweed	0.000		0.575	1.609
<i>Hypericum ascyron</i>	Great St. John's wort	0.000		1.379	3.860
<i>Hypericum virginianum</i>	Marsh St. John's wort	0.000		0.003	0.009
<i>Impatiens capensis</i>	Common Jewelweed	0.000		0.000	0.001
<i>Iris virginica shrevei</i>	Blueflag Iris	0.000		0.069	0.193
<i>Juncus interior</i>	Inland Rush	0.108	3.030	0.000	
<i>Juncus tenuis</i>	Path Rush	0.017	0.478	0.000	
<i>Koeleria cristata (macrantha)</i>	June grass	0.500	14.000	0.000	
<i>Lathyrus palustris</i>	Marsh Vetchling	0.000		0.000	0.001
<i>Lilium michiganense</i>	Michigan Lily (Turks Cap)	0.000		0.001	0.002
<i>Lobelia cardinalis</i>	Cardinal Flower	0.000		0.268	0.750
<i>Lobelia inflata</i>	Indian Tobacco	0.000		0.002	0.005
<i>Lobelia siphilitica</i>	Great Blue Lobelia	0.000		0.142	0.398
<i>Ludwigia alternifolia</i>	Seed Box	0.000		1.450	4.059
<i>Lycopus americana</i>	American Bugleweed	0.000		0.000	0.001
<i>Lysmachia lanceolata</i>	Lance Leaved Loosestrife	0.000		0.044	0.122
<i>Lythrum alatum</i>	Winged loosestrife	0.000		0.267	0.748
<i>Mimulus ringens</i>	monkey flower	0.000		2.362	6.614
<i>Micranthes pensylvanicus</i>	Swamp saxifrage	0.000		0.019	0.053
<i>Monarda fistulosa</i>	Beebalm	0.268	7.500	0.000	
<i>Monarda punctata villicualis</i>	Horse Mint	0.213	5.959	0.000	
<i>Nelumbo lutea</i>	American Lotus	0.000		0.295	0.825
<i>Napaea dioica</i>	Glade Mallow	0.000		0.182	0.509
<i>Oenothera biennis</i>	Common Evening Primrose	0.005	0.134	0.000	
<i>Onoclea sensibilis</i>	Sensitive fern	0.000		0.378	1.059
<i>Parnassia glauca</i>	Grass of Parnassus	0.000		0.003	0.007

Pedicularis lanceolata	Swamp betony	0.000		1.936	5.420
Penstemon digitalis	Foxglove beard tongue	0.463	12.960	0.000	
Penstemon hirsutus	Hairy beard tongue	0.232	6.500	0.000	
Penthorum sedoides	Ditch Stonecrop	0.000		2.179	6.100
Physocarpus opulifolius	Nine Bark	0.000		0.171	0.480
Physostegia virginiana	Prairie Obedient Plant	0.000		0.000	0.001
Pontederia cordata	Pickerel Weed	0.000		2.307	6.460
Prunus Americanus	American Plum	0.000		0.001	0.002
Rudbeckia hirta	Black-eyed susan	0.071	2.000	0.000	
Sagittaria latifolia	Arrowhead	0.000		0.378	1.059
Scirpus atrovirens	Dark green bulrush	0.000		1.161	3.250
Scirpus cyperinus	Wool grass	0.000		4.857	13.600
Schoenoplectus acutus	Hardstem Bullrush	0.000		0.216	0.604
Schoenoplectums tabernaemontani	Softstem Bullrush	0.000		0.335	0.939
Silphium integrifolium	Rosinweed	1.243	34.800	0.000	
Silphium laciniatum	Compass plant	2.396	67.100	0.000	
Silphium terebinthaceum	Prairie Dock	0.484	13.560	0.000	
Oligoneuron (solidago) riddellii	riddell's goldenrod	0.000		0.378	1.059
Sparganium eurycarpum	Giant Burr reed	0.000		0.575	1.609
Spartina pectinata	Cordgrass	0.000		3.661	10.250
Spirea alba	meadowsweet	0.000		0.039	0.110
Symphotrichum novae-angliae	New England Aster	0.000		3.571	10.000
Symplocarpus foetidus	Skunk Cabbage	0.000		0.002	0.006
Thalictrum dasycarpum	Purple Meadow Rue	0.000		0.136	0.381
Tradescantia ohiensis	Spiderwort	2.575	72.100	0.000	
Verbena hastata	Blue vervain	0.193	5.400	1.179	3.300
Verbena stricta	Hoary vervain	0.721	20.180	0.000	
Verbena urticifolia	Hairy White Vervain	0.190	5.309	0.000	
Vernonia missourica	Missouri Ironweed	0.000		0.003	0.009
Veronia fasciculata	Common Ironweed	0.000		6.732	18.850
Veronicastrum virginicum	Culver's Root	0.000		4.375	12.250
Zizia aptera	Heart-leaved golden alexander	0.013	0.367	0.000	
Zizia aurea	Golden alexander	0.505	14.150	0.000	
carex spp.	sedge mix	0.000		3.589	10.050
	Tall Grass (Big Blue and Indian)	2.734	76.550	0.000	
Schizachyrium scoparium	Little Bluestem	5.441	152.350	0.000	
Elymus canadensis	Canada Rye	7.178	200.980	0.000	
Sporobolus heterolepis	Prairie Dropseed	2.566	71.850	0.000	
	Aster and Goldenrod Mix	7.073	198.050	0.000	



Figure 2: Soil types and their locations within the planting, according to the key. Source: NRCS.

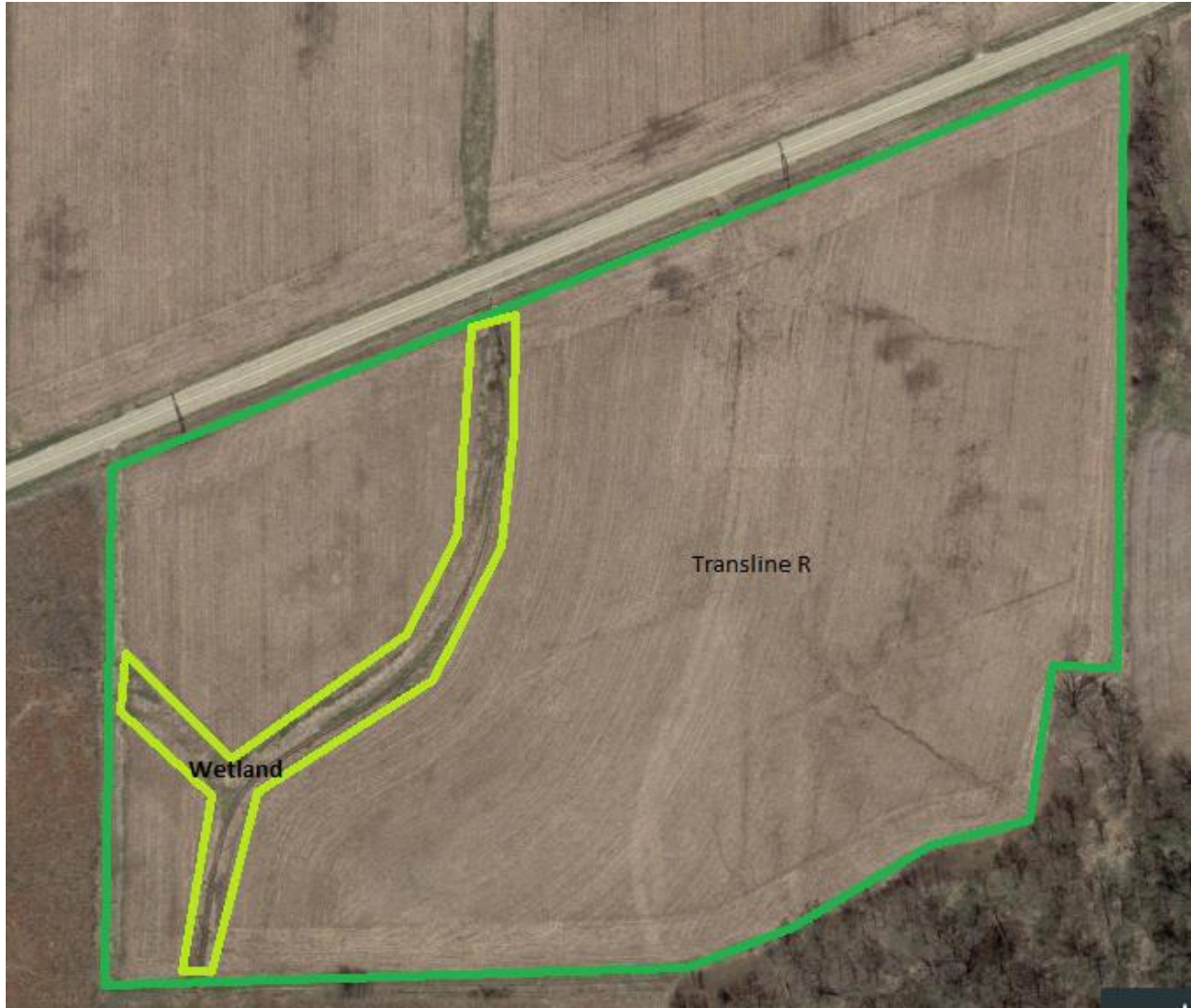


Figure 3: Map showing where the Transline R and the wetland seed mix were planted. Source: GoogleEarth.