

Planting #107
2013 Planting History
Holland Planting
Prepared by Cody Considine 12/16/2013

47 Acres Total

Dry: 9

Dry Mesic: 38

Mesic: 1 (1 acre was planted with mesic/wet and dry mesic seed.)

Site Conditions

Location:

General location – located just north of Hook Larson 2004 planting and west of the big hills at Holland.

GPS: 41°54'04.93"N 89°21'35.09"W Elevation: 759' – 708'

County: Ogle

Average rainfall per year: 38"

Average monthly rainfall average: 1.57" in February to 4.9" in June

Soil Types

According to the Web Soil Survey for the planting area in Ogle County, soils include:

Soils for both Dry and Dry Mesic

440C2 Jasper loam, 5 to 10 percent slopes, eroded. 1% of planting.

570 C2 Martinsville silt loam, 5 to 10 percent slopes, eroded. 2% of planting.

727B Waukee loam, 2-5 percent slopes. 88.5% of planting.

919D Rodman-Fox Complex, 6-12 percent slopes. 7% of planting.

919E Rodman-Fox Complex, 12-20 percent slopes. 2% of planting.

*All of the soils have been under intensive agriculture. Above are basic descriptions, a complete soil test is needed to determine specific soil characteristics. For more additional information see Soil Web Survey website: <http://websoilsurvey.nrcs.usda.gov/app/>

Topography

The general topography of the 2013 planting is flat to gently sloping. The elevation is higher on the south and gently slopes down to the north. The dry hills are easily distinguishable as they gently rise up across the planting. There is a drainage channel that may have been man made or formed as a result of continual erosion from the row crop tillage practices.

Agricultural History

The planting site has been intensively row cropped for many decades. Corn and soy bean the main crop. The 2013 crop was soy beans.

Site Preparations

The soy beans were harvested in mid-October. The 2013 season was very wet in the spring then very dry from August through October. Then November 18 the following was done prior to planting seed.

Breaking the soil crust in a harvested bean field has been a challenge in the past. Harrowing clumps up the bean residue and makes piles all over the field.

To eliminate bean piles and ensure good seed soil contact, we lightly disked the planting area. Cody disked and then Damian followed with harrow. The disc was lowered so that the wheels were just slightly off the ground. The discs went in about 2-3 inches into the soil. This incorporated the majority of bean residue into the soil. Then the harrow was able to smooth the surface of the field without having bean piles spread throughout the planting area. It took about 2.5 solid days of disking and harrowing to get the area ready to plant.

I am a little concerned about what the disking will do. Did disking 3" of soil bring up more weed seeds to the surface? Will we have an overabundance of annual ag weeds that might inhibit germination of our prairie seed? Hard to believe that it will considering what first year plantings look like on year one. If the planting is not affected by the disking, this may be a preferred method for a couple reasons. 1. The soil seed contact is better than traditionally prepped (corn stubble burn, then harrowed). 2. The freshly disked then smoothed field allowed us to plant the area very easily without having to use cones to see where we've been. 3. Disking and harrowing removed the ruts and eroded areas caused by intense agriculture.

Planting the seed

Weather: Steady rain (1-2") three days before with strong winds, soil still moist but not wet, seasonal temperatures in the 40s, a gentle, steady rain started immediately after finishing planting and continued through the night

The three dry hills were planted by Ben Adams, Kevin Helenthal, and Jessica Richert with the three antique seeders hooked up to the old white, green, and blue trucks.

Dry Hills (3 hills) – 7 acres

North Hill (3.8 acres) - The north hill was planted by Ben and Jess driving in concentric circles. Ben's seeder (the small orange one) was set to completely open. Jess's seeder (small red one) started out half open but slipped to full open. Jess's seeder ran out halfway through the first pass. Ben completed the first pass. One additional barrel of seed was taken from the south hill planting and seeded throughout the hill. A total of five barrels of seed (~35-45 lbs each) was used. Planting took ~45 minutes.

East Hill (0.5 acre) - The east hill was planted by Jess driving in concentric circles with the seeder set to half open on the first pass. The second pass was completed by driving in concentric circles in the

opposite direction, again with seeder set to half open. The third pass was completed by free for all with seeder set to three-quarters open. A total of two barrels of seed was used. Planting took ~30 minutes.

South Hill (4.25 acres) - The south hill (minus 1 acre for the conservative hill) was planted by Ben and Kevin driving in concentric circles. Ben's seeder was set to three-quarters open, while Kevin's was set to full open. The second pass was completed as a free for all until seeders were empty. A total of five barrels of seed was used. Planting took ~40 minutes.

Dry Mesic

Same weather and planting conditions as Dry areas.

The dry mesic area was split into three separate sections: North, Middle, and South. All areas were planted by Ben Adams, Kevin Helenthal, and Jess Richert.

South (~3.5 acres) - The first pass of the south section was completed driving in concentric circles. Ben's seeder (long orange one) was set to three-quarters open while both Kevin's (small red one) and Jess's (small orange one) were set to half open. The second pass was completed driving in horizontal lines with seeders at same settings. Additional seed was laid down when seeders were left open on way back to refilling station as well as being accidentally dumped while filling seeders. A total of five barrels was used. Planting took ~1 hour.

Middle (~30 acres) - The first pass of the middle section was completed driving in horizontal lines. Ben's and Jess's seeders were set at three-quarters open while Kevin's remained at half open. The second pass was completed driving in concentric circles with seeders at same settings. (Note: The second pass was completed as it got dark so the middle of the planting might not be as evenly coated) The third pass was completed as a free for all with all drivers laying down seed where they thought it was needed. A total of 40 barrels was used. Planting took ~5 hours.

North (~ 6 acres) - The first pass of the north section was completed driving in concentric circles. Ben's and Kevin's seeders were both set to three-quarters open while Jess's was set to full open. The second pass was completed driving in horizontal lines with seeders at same settings. The third pass was completed as a free for all with all drivers laying down seed where needed. A total of 8 barrels was used. Planting took ~2 hours.

Wet (.2 acre) – several wet species were planted in the polygon labeled “wet”. The spreadsheet only accounts for 3 species. However, the number of species is much more. The crew hand collected sedges in various sedge meadows and combined it into one mix. There are more than likely dozens of different species of carex. The dry mesic mix was also planted in the wet area. We decided to plant “wet” species in this little area since there were cattails growing there in past years. The farmer would often not plant this area because it was usually wet.

Conservative Hill

Conservative Hill is a 1 acre hill within the Dry South Hill. This little rise has very sandy erodible soils with a small exposed portion St. Peters Sandstone protruding on the east slope. This little hill is somewhat an experiment, a different approach to prairie restoration. Mostly, this little planting tests the proportionality of species in a mix. The mix had 86 species, similar to the dry mix which had 93. However, the volume of species within the mix was quite different. We planted conservative species much heavier than in the dry mix. For instance, cream bap was planted at 4lbs/acre, lead plant at 4lbs/acre, shooting star at 1lb/acre, Lia asp at 13lbs/acre, Lia cyl at 1lb/acre, N drop seed at 4lbs/acre to name a few. See species list below. We still included other common species but planted them at much lower rates compared to the dry mix. The question is will this mix give these conservative species a better chance to establish and increase? By planting this hill heavily skewed for a select few species, we might learn more on how to create mixes that have more abundance of these conservative species.

Step In

Weather and Planting Conditions- Overcast with temperature in the mid-40s, soil very moist from steady rain the night before

Date Planted- November 21, 2013

The rarest and least amounts of conservative species we have on the preserve were planted by the "step in" method. These species were all upland and therefore only planted on the three dry hills including Conservative Hill. The violets were seeded alongside but separate from the rest of the step in mix. Ben Adams, Kevin Helenthal, and Jess Richert planted the mix. Total planting time was ~4 hours.

Planting Mixes

Two mixes, Dry and Dry Mesic, were formulated for the 2013 Holland Planting. The mixes were developed with species appropriate for the expected habitat types located within the planting. The total number of species was basically the same as last year. Preparing for bison took a lot of our attention which took away from seed collecting at times. Overall we were able to plant the planting at a rate of 56lbs/acre for the Dry Mesic areas and 60lbs/acre for the Dry areas. The Conservative Hill was planted at 78lbs/acre.

Species Richness

Dry: 93

Dry Mesic: 79

Conservative Hill: 86

Total Species for Holland Planting: 125

| SCIENTIFIC NAME | COMMON NAME | Dry Mesic lbs/acre | DRY lbs/acre | Cons Hill Total lbs | Step in |
|-----------------------------------|----------------------------|-------------------------------|-------------------------|--------------------------------|----------------|
| Agrostis hymenalis | Tickle Grass | 0.200 | 0.200 | 0.100 | |
| Allium cernuum | Nodding Wild Onion | 0.000 | 0.168 | 0.400 | |
| Amorpha canescens | Leadplant | 2.200 | 2.676 | 4.000 | |
| Andropogon gerardii | Big Blue and Indian | 2.184 | 0.000 | | |
| Anemone canadensis | Meadow Anemone | 0.017 | 0.000 | | |
| Anemone cylindrica | Thimbleweed | 0.162 | 0.324 | 1.000 | |
| Anemone patens (Pulsatilla p.) | Pasque Flower | 0.000 | 0.000 | | 0.010 |
| Antennaria neglecta | Field Cat's Foot | 0.000 | 0.100 | | |
| Antennaria plantaginifolia | Pussy Toes (Everlasting) | 0.043 | 0.324 | 0.900 | |
| Apocynum cannabinum (X medium) | Dogbane (Indian Hemp) | 0.017 | 0.000 | | |
| Aristida longiseta | 3 awn grass | 0.063 | 0.124 | | |
| Artemisia caudata (campestris) | Beach Wormwood | 0.237 | 0.027 | 0.500 | |
| Asclepias amplexicaulis | Sand Milkweed | 0.000 | 0.000 | | 0.001 |
| Asclepias tuberosa interior | Butterfly Weed | 0.000 | 0.000 | 0.010 | |
| Asclepias verticillata | Whorled Milkweed | 0.000 | 0.078 | 0.050 | |
| Asclepias viridiflora | Short Green Milkweed | 0.000 | 0.000 | 0.010 | |
| Aster azureus (oolentangiensis) | Sky-blue Aster | 0.062 | 0.027 | 0.040 | |
| Aster ericoides (prostratus) | Heath Aster | 0.000 | 0.868 | 1.000 | |
| Aster linariifolius | Stiff Aster (Flax-Leaved) | 0.000 | 0.041 | 0.500 | 0.500 |
| Aster oblongifolius | Aromatic Aster | 0.000 | 0.027 | 0.050 | 0.550 |
| Aster ptarmicoides | White Aster (Stiff Aster) | 0.000 | 0.065 | 0.050 | |
| Aster sericeus | Silky Aster | 0.000 | 0.211 | 1.000 | |
| Astragalus canadensis | Canadian Milk Vetch | 0.250 | 0.054 | | |
| Baptisia leucantha | White Wild Indigo | 3.054 | 2.270 | | |
| Baptisia leucophaea | Cream Wild Indigo | 0.663 | 0.892 | 4.000 | |
| Bidens comosa (tripartia) | Swamp Tickseed | 0.000 | 0.000 | | |
| Bouteloua curtipendula | Side-Oats Grama | 0.242 | 0.270 | 0.500 | |
| Carex medeii | Meads sedge | 0.000 | 0.000 | 0.250 | |
| Castilleja sessiliflora ** | Downy Yellow Painted Cup | 0.000 | 0.108 | 0.500 | |
| Ceanothus americanus | New Jersey Tea | 0.000 | 0.016 | 0.250 | |
| Chrysopsis camporum (Heterotheca) | Golden Prairie Aster | 0.151 | 0.114 | 0.050 | |
| Coreopsis lanceolata | Sand Coreopsis | 0.000 | 0.000 | 0.500 | |
| Coreopsis palmata | Prairie Coreopsis | 1.095 | 1.378 | 2.000 | |
| Coreopsis tripteris | Tall Coreopsis | 0.547 | 0.000 | | |
| Cyperus filiculmis | Slender Sand Sedge | 0.000 | 0.011 | 0.250 | |
| Danthonia spictata | Poverty Oat Grass | 0.000 | 0.289 | 1.000 | |

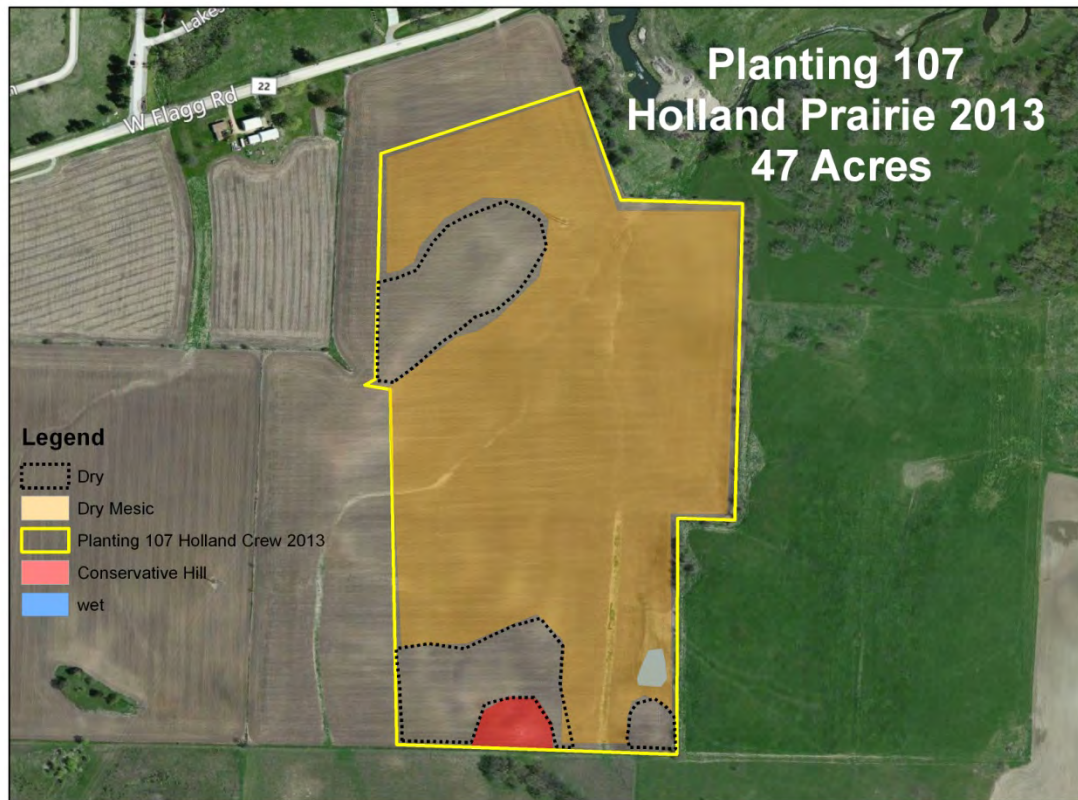
| | | | | |
|---|--|--------|--------|--------|
| <i>Desmodium illinoense</i> | Ill. Tick Trefoil | 0.347 | 0.054 | |
| <i>Dodecatheon meadia</i> | Shooting Star | 0.000 | 0.319 | 1.000 |
| <i>Echinacea pallida</i> | Pale Purple Coneflower | 10.628 | 10.811 | 10.811 |
| <i>Elymus canadensis</i> | Prairie Wild Rye | 3.276 | 0.446 | 0.446 |
| <i>Eragrostis spectabilis</i> | Purple Love Grass | 0.000 | 0.027 | 0.100 |
| <i>Erigeron strigosus</i> | Daisy Fleabane | 0.000 | 0.000 | |
| <i>Eryngium yuccifolium</i> | Rattlesnake Master | 0.918 | 0.432 | |
| <i>Eupatorium perfoliatum</i> | Boneset | 0.300 | 0.000 | |
| <i>Euphorbia corollata</i> | Flowering Spurge | 0.000 | 1.362 | 1.000 |
| <i>Gaura biennis pitcheri</i> (<i>longiflora</i>) | Common Gaura | 0.000 | 0.030 | |
| <i>Gentiana (alba) flavida</i> | Cream Gentian | 0.439 | 0.432 | 0.432 |
| <i>Gentiana purberulenta</i> | Prairie Gentian | 0.000 | 0.000 | 1.200 |
| <i>Gnaphalium obtusifolium</i> | Sweet Everlasting (Old-Field Balsam) | 0.036 | 0.070 | 0.001 |
| <i>Helianthemum canadense</i> | Common Rockrose (Frostweed) | 0.000 | 0.000 | 0.650 |
| <i>Helianthus occidentalis</i> | Western Sunflower; Naked S. | 1.132 | 0.892 | 2.000 |
| <i>Helianthus rigidus (laetiflorus)</i> | Prairie Sunflower | 0.114 | 0.027 | |
| <i>Heliopsis helianthoides</i> | False Sunflower; " Ox-eye " | 0.218 | 0.000 | |
| <i>Heuchera richardsonii grayana</i> | Rough Heuchera; Alum root | 0.000 | 0.000 | 0.250 |
| <i>Hieracium gronovii</i> | Hairy Hawkweed | 0.000 | 0.008 | 0.050 |
| <i>Juncus greenei</i> | Greene's Rush | 0.262 | 0.424 | 0.500 |
| <i>Juncus interior</i> | Inland Rush | 0.007 | 0.027 | 0.500 |
| <i>Juncus tenuis</i> | Path Rush | 0.030 | 0.054 | 0.050 |
| <i>Koeleria cristata (macrantha)</i> | Prairie June Grass | 1.229 | 1.784 | 1.784 |
| <i>Krigia virginica</i> | Dwarf Dandelion | 0.000 | 0.000 | 0.010 |
| <i>Kuhnia (Brickellia)</i> <i>eupatoroides corymbulosa</i> | False Boneset | 0.537 | 0.622 | 0.001 |
| <i>Lespedeza capitata --</i> | Round-headed Bush Clover Rough Blazing-star (Rough Gayfeather) | 1.909 | 2.432 | 0.500 |
| <i>Liatris aspera</i> | Dwarf Blazingstar | 2.251 | 4.432 | 13.000 |
| <i>Liatris cylindracea</i> | Tall Gayfeather; Prairie Blazing Star | 0.000 | 0.062 | 1.000 |
| <i>Liatris pycnostachya</i> | Fringed (Narrow-leaved) | 1.647 | 0.649 | 1.000 |
| <i>Lithospermum incisum</i> | Puccoon | 0.000 | 0.017 | 0.250 |
| <i>Lobelia spicata</i> | Pale-spike Lobelia | 0.000 | 0.000 | 0.100 |
| <i>Monarda fistulosa</i> | Wild Bergamot | 0.105 | 0.027 | |
| <i>Oenothera biennis canescens</i> | Common Evening Primrose | 0.000 | 0.000 | |
| <i>Oenothera clelandii</i> (<i>rhombipetala</i>) | Sand Evening Primrose | 0.000 | 0.000 | |
| <i>Onosmodium hispidissimum</i> | Marbleseed | 0.039 | 0.054 | |
| <i>Oxalis violacea</i> | Violet Wood-sorrel | 0.000 | 0.000 | |

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|---|----------------------------|-------|-------|-------|-------|
| <i>Panicum leibergii</i> | Prairie Panic Grass | 0.000 | 0.005 | 0.100 | |
| <i>Panicum oligosanthos scribneria</i> | Scribner's Panic Grass | 0.087 | 0.865 | 1.000 | |
| <i>Panicum villosissimum</i> | White-Haired Panic Grass | 0.007 | 0.027 | 0.500 | |
| <i>Panicum virgatum</i> | Prairie Switch Grass | 0.053 | 0.000 | | |
| <i>Parthenium integrifolium</i> | Wild Quinine (Feverfew) | 3.404 | 4.459 | 4.459 | |
| <i>Penstemon digitalis</i> | Foxglove Beardtongue | 0.066 | 0.000 | | |
| <i>Penstemon grandiflorus</i> | Large Flowered Beardtongue | 0.000 | 0.000 | 0.010 | |
| <i>Penstemon hirsutus</i> | Hairy Beard tongue | 0.000 | 0.341 | 1.000 | |
| <i>Petalostemum (Dalea) candidum</i> | White Prairie Clover | 1.084 | 0.892 | | |
| <i>Petalostemum (Dalea) purpureum</i> | Purple Prairie Clover | 3.089 | 4.459 | 6.000 | |
| <i>Phlox bifida</i> | Sand Phlox | 0.000 | 0.000 | 0.200 | |
| <i>Polygala polygama obtusata</i> | Purple Milkwort | 0.000 | 0.000 | | 0.001 |
| <i>Polygala sanguinea</i> | Field Milkwort | 0.000 | 0.000 | 0.050 | |
| <i>Polytaenia nuttallii</i> | Prairie Parsley | 0.000 | 0.024 | 0.400 | |
| <i>Potentilla arguta</i> | Prairie Cinquefoil | 0.158 | 0.003 | | |
| | Narrow-leaved Mountain | | | | |
| <i>Pycnanthemum tenuifolium</i> | Mint | 0.100 | 0.000 | | |
| | Mountain mint (Prairie | | | | |
| <i>Pycnanthemum virginianum</i> | Hyssop) | 0.122 | 0.027 | | |
| <i>Ratibida pinnata</i> | Yellow Coneflower | 0.107 | 0.000 | | |
| <i>Rhus aromatica</i> | fragrant sumac | 0.000 | 0.108 | 0.500 | |
| <i>Rosa carolina</i> | Pasture Rose | 0.339 | 0.892 | 1.000 | |
| <i>Rudbeckia hirta</i> | Black-eyed Susan | 0.299 | 0.054 | | |
| <i>Ruellia humilis</i> | Wild Petunia | 0.000 | 0.143 | 0.500 | |
| <i>Scutellaria parvula leonardi</i> | Small Skullcap | 0.000 | 0.000 | 0.100 | |
| <i>Senecio pauperculus</i> | Balsam Ragwort | 0.013 | 0.022 | 0.400 | |
| <i>Silene antirrhina</i> | Sleepy Catchfly | 0.000 | 0.005 | 0.200 | |
| <i>Silphium integrifolium</i> | Rosinweed | 0.188 | 0.000 | | |
| <i>Silphium laciniatum</i> | Compass plant | 1.770 | 0.897 | | |
| <i>Silphium perfoliatum</i> | Cup-plant | 0.000 | 0.000 | | |
| <i>Silphium terebinthaceum</i> | Prairie Dock | 1.472 | 0.054 | | |
| <i>Sisyrinchium albidum</i> | Common Blue-eyed Grass | 0.000 | 0.000 | | 0.600 |
| <i>Solidago (Euthamia) graminifolia nuttallii</i> | Grass-leaved Goldenrod | 0.582 | 0.892 | 0.892 | |
| <i>Solidago missouriensis fasciculata</i> | Missouri Goldenrod | 0.914 | 0.432 | 0.432 | |
| <i>Solidago nemoralis</i> | Gray Goldenrod; Oldfield | 0.212 | 0.892 | 0.892 | |
| <i>Solidago rigida</i> | Stiff Goldenrod | 0.026 | 0.000 | | |
| <i>Solidago speciosa</i> | Showy Goldenrod | 0.026 | 0.000 | | |
| <i>Sporobolus heterolepis</i> | Prairie Dropseed | 0.855 | 1.419 | 1.419 | |
| <i>Stipa spartea</i> | Porcupine Grass | 0.000 | 0.022 | 0.200 | |

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|---|----------------------------|-------|--------|-------|-------|
| Talinum rugospermum *** | Sand Farnflower | 0.000 | 0.000 | 0.400 | |
| Tephrosia virginiana | Goat's Rue | 0.250 | 1.784 | 1.784 | |
| Tradescantia ohiensis | Ohio Spiderwort | 0.738 | 0.892 | 3.000 | |
| | Horse Gentian | | | | |
| Triosteum perfoliatum | (Feverwort)(Tinker's Weed) | 0.124 | 0.000 | | |
| Verbena stricta | Hoary Vervain | 0.295 | 0.054 | | |
| Verbena urticifolia | Hairy White Vervain | 0.080 | 0.027 | | |
| Veronicastrum virginicum | Culver's Root | 0.224 | 0.000 | | |
| Viola pedata lineariloba | Birdsfoot Violet | 0.000 | 0.000 | | 0.100 |
| Viola pedatifida | Prairie Violet | 0.000 | 0.000 | | 2.150 |
| Viola sagittata | Arrow-leaved violet | 0.000 | 0.000 | | 0.100 |
| Wulfenia bullii *** (Bessey) | Kittentails | 0.000 | 0.049 | 0.400 | |
| | Heart-leaved Meadow | | | | |
| Zizia aptera | Parsnip | 0.000 | 0.049 | 0.400 | |
| Zizia aurea | Golden Alexanders | 0.534 | 0.000 | | |
| | Common Water Plantain | 0.000 | 0.000 | | |
| | | 0.000 | 0.000 | | |
| | | 0.000 | 0.000 | | |
| ODD MIXES | | 0.000 | 0.000 | | |
| mo gr grass leaved gr oldfield | | 0.074 | 0.000 | | |
| Aster mix: smooth, sky blue | | 1.082 | 0.514 | | |
| Little blue with cut stems no pure seed in 2012 and 2013 | | 0.293 | 2.795 | 3.000 | |
| prairie coreopsis and w sunflower | | 0.000 | 0.170 | | |
| bicnells sedge and Sally's sedgemoadow crew mistake mixed them together | | 1.059 | 0.892 | | |
| TOTAL Pounds/Acre | | 56.05 | 60.075 | 78.78 | 5.2 |

The excel spreadsheet where this list was copied from is found T:\Nachusa Project\Stewardship\PLANTING HISTORIES & INVENTORIES\Planting 107 Holland Prairie Crew 2013. The total species diversity is not completely reflected in the spreadsheet. See the section before the long list species for the most accurate amount of species that were planted in the planting. There was numerous times where we combined several species into one mix.

Map:



Map saved in T:\Nachusa Project\Stewardship\PLANTING HISTORIES & INVENTORIES\Planting 107 Holland Prairie Crew 2013

Lessons Learned

If planting in beans, it was very helpful to disk and harrow prior to planting. This made it much easier to plant. Drivers could see their tracks which made the planting less stressful and probably did a better job covering the area. We had plenty of orange safety cones this year and they were useful. Since the planting was disked and harrowed, we didn't need them as badly.



Ben Adams, Kevin Hellenthal and Jess Reichart 2013 Planting Holland Prairie. Damian in the background harrowing. They did an excellent job. Looking northwest.

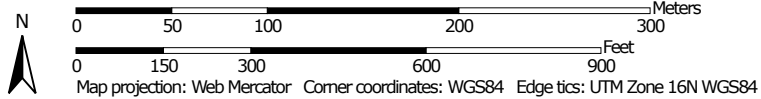


Filling up seeders looking east.

Soil Map—Ogle County, Illinois
(2013 Holland Crew Planting)




Map Scale: 1:3,950 if printed on A portrait (8.5" x 11") sheet.




MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features



Blowout



Borrow Pit



Clay Spot



Closed Depression



Gravel Pit



Gravelly Spot



Landfill



Lava Flow



Marsh or swamp



Mine or Quarry



Miscellaneous Water



Perennial Water



Rock Outcrop



Saline Spot



Sandy Spot



Severely Eroded Spot



Sinkhole



Slide or Slip



Sodic Spot



Spoil Area



Stony Spot



Very Stony Spot



Wet Spot



Other



Special Line Features

Water Features



Streams and Canals

Transportation



Rails



Interstate Highways



US Routes



Major Roads



Local Roads

Background



Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:12,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL: <http://websoilsurvey.nrcs.usda.gov>
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Ogle County, Illinois
Survey Area Data: Version 9, Jan 20, 2012

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Apr 29, 2011—Jun 13, 2011

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

| Ogle County, Illinois (IL141) | | | |
|------------------------------------|--|--------------|----------------|
| Map Unit Symbol | Map Unit Name | Acres in AOI | Percent of AOI |
| 440C2 | Jasper loam, 5 to 10 percent slopes, eroded | 0.4 | 0.9% |
| 570C2 | Martinsville silt loam, 5 to 10 percent slopes, eroded | 0.8 | 1.7% |
| 727B | Waukee loam, 2 to 5 percent slopes | 40.2 | 88.5% |
| 919D | Rodman-Fox complex, 6 to 12 percent slopes | 3.0 | 6.7% |
| 919E | Rodman-Fox complex, 12 to 20 percent slopes | 1.1 | 2.3% |
| Totals for Area of Interest | | 45.5 | 100.0% |