

PLANTING #99
2011 PLANTING HISTORY
Holland Planting
Prepared by Cody Considine 12/14/11
Updated:

48 Acres
Dry Hill: 1 acre
Dry Mesic/Mesic: 47 acres
Wet: 9 acres within Dry/Mesic area

Site Conditions

Location: T22N R9-10E Section 16
GPS: 41°53'48.01"N 89°20'33.94"W elevation 717'-750'

Ogle County IL

Average rainfall per year: 38"
Average monthly rainfall range: 1.57" in February and 4.9" in June

Soil Types

According to the Web Soil Survey for Ogle County, IL soils include:

Dry Mesic and Wet Areas – 47 acres.

102A La Hogue loam (18.3 acres, 36% of the planting), 0-2% slopes. Somewhat poorly drained. Parent material: Outwash. Typical profile: 0-16" loam, 16-26" clay loam, 26-36" sandy clay loam, 36-61" Sandy loam, 61-65" stratified silt loam.

125A Selma loam (.2 acres, 0.4% of the planting), 0-2% slopes. Poorly drained, occasional ponding. Parent material: outwash. Depth to water table: 0-12". Typical Profile: 0-53" loam, 53-60" Stratified silt loam.

397D Boone loamy fine sand (0.3 acres, 0.6% of the planting), 7-15% slopes. Excessively drained. Parent material: Siliceous sandy residuum weathered from sandstone. Typical profile: 0-9" Loamy fine sand, 9-34" Fine sand, 34-60" Bedrock.

570C2 Martinsville silt loam (0.01 acres, 0.1% of the planting), 5-10% slopes, eroded. Parent material: outwash. Well drained. Typical profile: 0-10" silt loam, 10-44" clay loam, 44-52" Sandy loam, 52-60" Stratified sandy loam to loam silt loam.

727B Waukee loam (31.7 acres, 62% of the planting), 2-5% slopes. Well Drained. Parent material: outwash. Typical profile: 0-30" Loam, 30-60" Coarse Sand.

Dry Hill – 1 acre

125A Selma loam (.2 acres, 0.4% of the planting), 0-2% slopes. Poorly drained, occasional ponding. Parent material: outwash. Depth to water table: 0-12". Typical Profile: 0-53" loam, 53-60" Stratified silt loam.

*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 2011 planting is flat to gently sloping. The planting elevation is higher on the west side and gently slopes to the east and then eventually west. The one acre dry hill is easily distinguished from the rest of the planting. There is a slight evenly shaped dip where the tile used to be located. This waterway was probably manmade to help drain the field.

Agriculture History

The planting site has been intensively row cropped for many decades. Corn and soy bean the main crop. More recently, at least within the last 5 years, the field has been planted to corn each year. The farmer would often bail the excess stalks after the harvest to feed to his cattle. We stopped him from doing this after 2007. There used to be a feed lot where the barns are located, manure would be spread across this field during the off season (late fall through early spring). This may cause some potential problems if weed seeds were in the manure and eventually spread throughout the field.

Site preparations

Corn harvested in mid-October.

1. Corn stubble burned in late October.
2. Mark Kruis sprayed round-up at 5% solution on all the exterior edges, obviously not the 2010 planting edge. He also sprayed the dry hill and random places throughout the planting area where any green plants appeared.
3. Over 3,500' of drainage tile removed in November. Main line ran from Holland House driveway to Stonebarn Rd. 8-12" in places. Some of the tile was clay, plastic, and concrete.
4. Bulldozer made two scrapes. One of which, included a small berm to back up the flowing water.
5. The planting was harrowed by Shannon Godby, Cody Considine, and Bill Kleiman. The harrowing was not all done the same day as planting, but the soil "crust" was broken and ideal at the time of planting.

Dry Hill – 1 acre – November 21, 2011 – prepared by Cody Considine

Weather and Planting conditions

The weather was nice and sunny and dry.

This 1 acre planting was done by Cody Considine on 11/21/11 using the Kubota tractor and Vicon pendulum broadcast planter. Total planting time took about 2 hrs. See species list below for specific species and the rates that they were planted at.

South Quadrant – 30 acres planting – November 22 and 23 – prepared by Elizabeth Jordan

Weather and Planting Conditions

Day 1: 11/22/11: Damp soil, light sprinkling late the day forcing an early quit due to soft soil.

Day 2: 11/23/11: Early morning dew to sunshine and harder soil

We used a dry mesic mix to cover the south quadrant. The goal was to cover the planting with two different configurations of passes. Heather Marshall, Mark Kruis, Matthew Gonerman, and Elizabeth Jordan began planting with the blue truck, little and big red, and the Kubota tractor, using two 10' seeders and one 12' foot seeder and a Vicon pendulum broadcast seeder attached to the tractor.

The first pass we had the seeders open about half way. The vehicles were lined up on the southwest corner near the brush piles, with the first truck leading on the outside edge. The crew decided a corner start would be easier to make the inward turns, rather than in the middle of the planting. The vehicles were lined up behind, with the seeder slightly overlapping the seeder of the vehicle in front of them. From the corner the vehicles headed north making concentric circles in a clockwise movement. At each corner the last vehicle would place a cone/bucket on the inside edge of their seeder. This would be the marker for the lead truck to turn in to. The crew covered about 2/3 of the south quadrant when due to steady rain and muddy conditions they called it quits for the day.

The next day the crew finished the circle pattern. After assessing how much seed was used during the first pass and what was left the crew decided to open the seeders all the way. The second pass was to be done using a grid pattern, with the grid lines running east to west. The trucks lined up on the northwest corner and headed east. Once an end was reached the lead truck would drive in front of the other vehicles using the last vehicle as a guide to line up for the opposite direction. The rest of the vehicles would follow similarly. When the last vehicle had completely turned and straightened out, they would place a cone/bucket on the outside edge of the seeder to mark a guide for the return lead vehicle.

Once the second pass was completed the crew again reassessed the amount of seed left. The crew decided to do another grid pattern, however this time working in a north-south direction. Also the crew was not confident about complete boarder coverage because of having to take wide turns with the trucks and seeders. So they decided the Kubota tracker should make two passes around the boarder to guarantee coverage. The trucks lined up at the southeast corner of the southern quadrant. Unlike the other passes the trucks spaced out with about a trucks distance between them and drove side-by-side. This was to make sure they could complete the pass without running out of seed.

Once this pass was complete there was a small amount of seed left so the trucks and tracker drove around the field randomly without any order or configuration until the seeders were empty.

Wet Seam – 9 acres – November 28, 2011 – Prepared by Elizabeth Jordan

Weather and Planting Conditions – Soft soil, cold day, windy

Because the area that needed to be covered was wet or standing water the crew could not drive the seeders. The crew hand spread the wet mix seed. They started on the north edge and walked south carrying buckets and moving the barrels. The crew gave themselves about a twenty- foot safety net out from any areas that appeared wet or might become wet. Some of the areas that appeared wet continued into the 2010 Doug Jr. planting about twenty to thirty feet. The crew seeded this area also. The crew felt confident the area was covered well and evenly.

Middle Quadrant – 4 acres – November 23, 2011 – Prepared by Elizabeth Jordan

Weather and Planting Conditions – November 23, sunny, moist soft soil, but drivable, and no ruts were formed.

The middle quadrant was to be covered with the Mesic dry mix. With the small area the crew decided to open the seeders all the way and make one pass in the concentric circle pattern, similar to the first pass technique used for the southern quadrant. The pass was done with the three trucks. The Kubota tractor covered the perimeter and corners. The crew was able to finish a second pass using a grid-line pattern. They started in the North East corner and drove in East-West lines, progressing towards the south. This was done with the three trucks and the Kubota tractor covering a small part of this section around the dry hill that would be difficult to cover with the grid-line pattern. After the pass there was a small amount of seed left so the trucks and tractor drove around the middle quadrant in a random order without any pattern.

North Quadrant – 6 acres – November 25, 2011 – Prepared by Cody Considine

Weather and Planting Conditions – Nice and sunny, soil very wet where tiles came out otherwise just right.

Bill K and Jay S used two drop seeders to plant. We made two passes. We used same settings that the machines were on for previous users. We used a foam marker Bill rigged up that sat in the bed of the truck and dropped foam onto one side of the truck. The foam lasted up to an hour. The foam marker did help but because there were two trucks, and only one had a foam marker you had to think about which direction of travel you were going to move in.

Step IN – 1 acre Hill, Wet Species, Doug Jr.

The one acre dry hill

This hill was stepped in by Cody. See species list below. A small plastic sandwich bag of Prairie violet seed from Larry Creekmur was also stepped in. This seed is not reflected in the species list below.

Damian Considine donated two dozen caps of Prairie Lilly; most of the seed was planted on this dry hill and Doug Jr.

Wet species

Heather Baker, Mark Kruis, Matt Gonnerman, Shannon Godby, and Elizabeth Jordan planted the wet seed. This seed mix was specifically designed for the wettest areas. The crew simply took five gallon pales full of seed and distributed it where the field was already very wet and where we predicted the field to become very wet. Mark, Cody, Pat, Tyler, and Bryon planted about 1,000 Turk's Cap lilies using a small spade. These lilies were planted in and near the current wetland scrapes.

Doug Jr.

Shannon Godby spent two days stepping in the specialty designed mix for Doug JR.

Overseed

Doug Jr. Over Seed:

Mark Kruis planted a specially designed mix to overseed Doug Jr. Mark also planted 40lbs of regular mix just to the north of Doug Jr. over a couple acres where we had an abundance of thistles and sweet clover.

2009 Holland Planting

Heather Baker and Elizabeth Jordan planted a couple hundred pounds of BME seed mix from the 2010 harvest across the 2009 Holland Planting.

Buffer

Cody did 2 passes of Canada Rye along the edges of the planting (not the edge of 2010/11 planting) to aide in helping keep the perimeter weed pressure at bay.

Seed Planting Mixes:

The 2011 Holland planting consisted of three mixes calculated by Cody. The main mix which planted 49 acres out of 50 was called the Dry Mesic Mix. The species within this mix could live in both dry and mesic conditions. The Dry Hill mix contained species that could only tolerate dry conditions. The wet mix was formulated to a species recipe that could only tolerate wet conditions. The Dry Mesic mix was planted on the entire planting area except the dry hill. Since we didn't know how wet or dry the field was going to get we decided to plant this mix everywhere to hedge ourselves. The wet mix was then planted in the areas where we thought it was going to be or already was wet. So essentially, the wet areas were planted

Planting Rate (lbs/acre)

1. The Dry Mesic was planted at a rate of **62lbs/acre** across the 49 acres.
2. The Dry Hill mix was planted at a rate of **100lbs/acre**, the dry hill was only 1 acre in size.
3. The wet mix was planted across the 8 acres that was wet or we thought would become wet overtime. So the essential planting rate in the wet area came to be about **123lbs/acre**.

See the species list below for specific planting rate of each species.

Seed Species List

The combined total of species planted in the 2011 Holland Planting came to 231 species. There are a handful of wetland carex species that we did not identify, so the total amount of species is actually higher than 231.

Dry Mesic Mix: 101 species

Dry Hill Mix: 84

Wet Mix: 102 species

SCIENTIFIC NAME	COMMON NAME	Dry Mesic	Dry - 1	Doug Jr	Wet -
		48 acres lbs/ac re		Step in - 8 acres lbs/ac re	8 acres lbs/ac re
Agalinis purpurea	Purple false foxglove	0.000	0.000	0.000	0.1125
Allium cernuum	Nodding Wild Onion	0.116	1.000	0.125	0
Amphicarpa bracteata comesa	Lowland hog peanut	0.000	0.000	0.000	0.03125

<i>Amorpha canescens</i>	Leadplant	0.839	5.400	2.000	0
<i>Amorpha fruticosa</i>	Indigo Bush	0.127	0.000	0.000	0.75
<i>Andropogon gerardii</i>	Big Bluestem; Turkeyfoot	0.000	0.000	0.000	0
<i>Schizachyrium scoparium</i>	Little Bluestem	5.208	5.000	0.000	0
<i>Angelica grandifolia</i>	Great Angelica	0.000	0.000	0.000	3.24375
<i>Anemone canadensis</i>	Meadow Anemone	0.004	0.000	0.000	0
<i>Anemone cylindrica</i>	Thimbleweed	0.288	0.500	0.250	0
<i>Antennaria plantaginifolia</i>	Pussy Toes (Everlasting)	0.173	2.500	0.000	0
<i>Apocynum cannabinum</i> (X medium)	Dogbane (Indian Hemp)	0.021	0.000	0.000	0.3125
<i>Aristida longiseta</i>	3 awn grass	0.076	1.000	0.500	0
<i>Artemisia caudata</i> (campestris)	Beach Wormwood	0.510	0.500	0.000	0
<i>Asclepias hirtella</i>	Hairy / tall Green Milkweed	0.010	0.001	0.000	0
<i>Asclepias incarnata</i>	Swamp Milkweed	0.000	0.000	0.000	0.05625
<i>Asclepias verticillata</i>	Whorled Milkweed	0.065	0.500	0.000	0
<i>Aster azureus</i> (oolentangensis)	Sky-blue Aster	0.031	0.000	0.000	0
<i>Aster ericoides</i> (prostratus)	Heath Aster	0.764	1.000	0.000	0
<i>Aster laevis</i>	Smooth (Blue) Aster	0.031	0.000	0.000	0
<i>Aster linariifolius</i>	Stiff Aster (Flax-Leaved)	0.174	2.000	0.000	0
<i>Aster novae-angliae</i>	New England Aster	0.000	0.000	0.000	1.4625
<i>Aster oblongifolius</i>	Aromatic Aster	0.000	0.500	0.250	0
<i>Aster ptarmicoides</i>	White Aster (Stiff Aster)	0.000	0.500	0.456	0
<i>Aster sericeus</i>	Silky Aster	0.368	1.000	1.000	0
<i>Aster umbellatus</i>	Flat-topped Aster	0.000	0.000	0.000	0.5375
<i>Astragalus canadensis</i>	Canadian Milk Vetch	0.214	0.000	0.000	0
<i>Baptisia leucantha</i>	White Wild Indigo	1.764	0.000	0.000	0
<i>Baptisia leucophaea</i>	Cream Wild Indigo	0.142	1.000	0.125	0
<i>Boltonia latisquama</i> ** (asteroides)	False Aster	0.000	0.000	0.000	0.11875
<i>Bouteloua curtipendula</i>	Side-Oats Grama	0.120	0.000	0.000	0
<i>Bouteloua hirsuta</i>	Hairy Grama	0.000	0.001	0.000	0
<i>Cacalia atriplicifolia</i>	Pale Indian Plantain	0.010	0.000	0.000	0
<i>Cacalia plantaginea</i> (tuberosa)	Indian Plantain	0.000	0.000	0.000	0.13125
<i>Cacalia suaveolens</i>	Sweet-scented Indian Plantain	0.000	0.000	0.000	0.9875
<i>Calamagrostis canadensis</i>	Blue Joint Grass	0.000	0.000	0.000	7
<i>Callirhoe triangulata</i>	Clustered Poppy Mallow	0.000	0.400	0.050	0
<i>Carex bicknellii</i>	Copper-shouldered oval Sedge	0.999	0.500	0.750	0
<i>Carex medeii</i>	Meads sedge	0.000	0.500	0.000	0
<i>Carex muhlenbergii</i> (enervis)	Sand Bracted Sedge	0.000	0.450	0.000	0

	(Muhlenberg's)				
Carex pellita (lanuginosa)	Broad-leaved Woolly Sedge	0.006	0.000	0.000	0.0375
Carex stipata	Common Fox Sedge	0.000	0.000	0.000	0.01
Cassia fasciculata	Partridge Pea	0.105	0.400	0.000	0
Cassia hebecarpa	Wild Senna	0.031	0.000	0.000	0
Castilleja sessiliflora **	Downy Yellow Painted Cup	0.000	1.250	0.156	0
Cephalanthus occidentalis	Buttonbush	0.000	0.000	0.000	0.125
Chelone glabra	Turtlehead	0.000	0.000	0.000	0.0375
Chrysopsis camporum (Heterotheca)	Golden Prairie Aster	0.248	1.000	0.000	0
Cirsium hillii *** (pumilum)	Hill's Thistle	0.000	0.150	0.013	0
Cirsium muticum	Swamp Thistle	0.000	0.000	0.000	0.125
Comandra umbellata (richardsoniana)	False Toadflax	0.000	0.001	0.000	0
Coreopsis lanceolata	Sand Coreopsis	0.021	0.500	0.063	0
Coreopsis palmata	Prairie Coreopsis	0.407	1.000	0.331	0
Coreopsis tripteris	Tall Coreopsis	0.118	0.000	0.000	0.625
Cuscuta campestris	field dodder	0.009	0.000	0.000	0
Cyperus filiculmis	Slender Sand Sedge	0.000	0.200	0.000	0
Danthonia spicata	Poverty Oat Grass	0.000	2.750	0.000	0
Desmodium illinoense	Ill. Tick Trefoil	0.322	1.000	0.000	0
Dodecatheon meadia	Shooting Star	0.000	3.200	0.113	0
Echinacea pallida	Pale Purple Coneflower	10.77	8.000	8.250	0
Elymus canadensis	Prairie Wild Rye	0.852	0.000	0.000	0
Elymus virginicus	Va. Wild Rye	0.008	0.000	0.000	0
Epilobium coloratum	Cinnamon Willow Herb	0.000	0.000	0.000	0.05625
Eragrostis spectabilis	Purple Love Grass	0.038	0.500	0.000	0
Erigeron strigosus	Daisy Fleabane	0.118	0.000	0.000	0
Eryngium yuccifolium	Rattlesnake Master	0.842	0.000	0.000	1.625
Eupatorium maculatum	Spotted Joe Pye Weed	0.000	0.000	0.000	4.25
Eupatorium perfoliatum	Boneset	0.083	0.000	0.000	1.925
Euphorbia corollata	Flowering Spurge	1.487	2.000	1.875	0
Galium boreale	Northern Bedstraw	0.008	0.200	0.025	0
Gaura biennis pitcheri (longiflora)	Common Gaura	0.000	0.100	0.000	0
Gentiana (Gentianopsis) crinita	Fringed Gentian	0.019	0.000	0.000	0.1125
Gentiana andrewsii	Bottle (or Closed) Gentian	0.000	0.000	0.000	0.01875
Gentiana purberulenta	Prairie Gentian	0.002	0.000	0.000	0
Geum triflorum	Prairie Smoke (Long-plumed Purple Avens)	0.000	0.050	0.000	0
Gnaphalium obtusifolium	Sweet Everlasting (Old-Field Balsam)	0.106	0.000	0.000	0
Habenaria leucophea	E. Prairie Fringed Orchid	0.000	0.000	0.000	0.0125

Helenium autumnale	Sneezeweed	0.080	0.000	0.000	0.48125
Helianthemum canadense	Common Rockrose (Frostweed)	0.154	2.000	0.250	0
Helianthus occidentalis	Western Sunflower; Naked S.	0.563	2.000	0.500	0
Helianthus rigidus (laetiflorus)	Prairie Sunflower	0.147	0.000	0.000	0
Heliopsis helianthoides	False Sunflower; " Ox-eye "	0.104	0.000	0.000	0
Heuchera richardsonii grayana	Rough Heuchera; Alum root	0.000	0.500	0.056	0
Hieracium gronovii	Hairy Hawkweed	0.007	0.000	0.000	0
Houstonia (Hedyotis) longifolia (canadense)	Long-Leaved Bluets	0.000	0.000	0.025	0
Humulus lupulus	Common Hop	0.000	0.000	0.000	0.0125
Hypericum punctatum	Spotted St. Johnswort	0.004	0.000	0.000	0
Hypericum pyramidatum	Great St. Johnswort	0.000	0.000	0.000	0.2
Hypoxis hirsuta	Yellow Star Grass	0.000	0.050	0.000	0
Iris versicolor	tall blue flag iris	0.000	0.000	0.000	0.4625
					0.00012
Iris virginica shrevei	Blue Flag	0.000	0.000	0.000	5
Juncus dudleyi	Dudley's Rush	0.000	0.001	0.000	0
Juncus greenei	Greene's Rush	0.069	1.000	0.250	0
Koeleria cristata (macrantha)	Prairie June Grass	0.964	2.000	0.000	0
Kuhnia (Brickellia) eupatoroides corymbulosa	False Boneset	0.089	0.000	0.000	0
Lechea tenuifolia	Slender-Leaved Pinweed	0.000	1.000	0.406	0
Lechea villosa (mucronata)	Hairy Pinweed	0.000	0.650	0.063	0
Lespedeza capitata --	Round-headed Bush Clover	3.649	1.000	0.000	0
Lespedeza leptostachya ****	Prairie Bush Clover	0.000	0.001	0.000	0
	Rough Blazing-star (Rough Gayfeather)	6.778	10.000	3.750	0
Liatris aspera	Dwarf Blazingstar	0.021	0.000	0.119	0
Liatris cylindracea	Tall Gayfeather; Prairie Blazing Star	0.000	0.000	0.000	4.35
Liatris pycnostachya	Turk's Cap lily	0.000	0.000	0.000	0.00625
Lilium michiganense	Prairie Lily; Wood Lily;				
Lilium philadelphicum andinum	Western Lily	0.000	0.050	0.006	0
Linum sulcatum	Groved Yellow Flax	0.000	0.001	0.000	0
Lithospermum canescens	Hoary Puccoon	0.000	1.250	0.000	0
	Fringed (Narrow-leaved)				
Lithospermum incisum	Puccoon	0.000	0.001	0.000	0
Lobelia cardinalis	Cardinal Flower	0.000	0.000	0.000	0.25
Lobelia siphilitica	Great Lobelia	0.000	0.000	0.000	0.3875
Lobelia spicata	Pale-spike Lobelia	0.001	0.000	0.000	0
Ludwigia alternifolia	Seed Box	0.000	0.000	0.000	1.38125
Lycopus americanis	common horehound	0.000	0.000	0.000	0.5125

Lysimachia thrysiflora	Tufted Loosestrife	0.000	0.000	0.000	0.78125 0.00012
Lythrum alatum	Winged Loosestrife	0.000	0.000	0.000	5
Mimulus ringens	Monkey Flower	0.000	0.000	0.000	0.075
Monarda fistulosa	Wild Bergamot	0.063	0.000	0.000	0
Monarda punctata villicualis	Horse Mint	0.000	0.100	0.000	0
Napaea dioica	Glade Mallow	0.000	0.000	0.000	0.80625
Oenothera biennis canescens	Common Evening Primrose	0.061	0.000	0.000	0
Onosmodium hispidissimum	Marbleseed	0.000	0.150	0.000	0
Oxalis violacea	Violet Wood-sorrel	0.000	0.100	0.031	0
Panicum leibergii	Prairie Panic Grass	0.000	0.500	0.000	0
Panicum oligosanthos					
scribneria	Scribner's Panic Grass	0.091	0.500	0.000	0
Panicum villosissimum	White-Haired Panic Grass	0.000	0.150	0.000	0
Parthenium integrifolium	Wild Quinine (Feverfew)	2.747	3.000	0.000	0
	Fen (Swamp) Betony;				
Pedicularis lanceolata	Lousewort	0.000	0.000	0.000	1.5125
Penthorum sedoides	Ditch Stone crop	0.000	0.000	0.000	0.09375
Penstemon digitalis	Foxglove Beardtongue	0.042	0.000	0.000	0
	Large Flowered				
Penstemon grandiflorus	Beardtongue	0.000	0.250	0.031	0
Penstemon hirsutus	Hairy Beard tongue	0.000	1.150	0.000	0
Petalostemum (Dalea)					
candidum	White Prairie Clover	1.154	0.400	0.000	0
Petalostemum (Dalea)					
purpureum	Purple Prairie Clover	1.814	3.000	0.000	0
Phlox bifida	Sand Phlox	0.000	0.030	0.014	0
Phlox pilosa	Prairie phlox	0.000	0.000	0.063	0
Physocarpus opulifolius	Ninebark	0.007	0.000	0.000	0
Physostegia virginiana					
arenaria	Prairie Obedient Plant	0.000	0.000	0.000	0.0125
Polemonium reptans	Jacob's Ladder	0.000	0.000	0.000	0
Polygala sanguinea	Field Milkwort	0.000	0.150	0.000	0
Polytaenia nuttallii	Prairie Parsley	0.008	0.400	0.206	0
Potentilla arguta	Prairie Cinquefoil	0.231	0.000	0.000	0
	Mountain mint (Prairie				
Pycnanthemum virginianum	Hyssop)	0.694	0.000	0.000	1.25
Rhexia virginica	Meadow Beauty	0.000	0.000	0.000	1.15
Rhus aromatica	fragrant sumac	0.000	0.250	0.031	0
Rosa carolina	Pasture Rose	0.296	1.000	0.000	0
Rudbeckia hirta	Black-eyed Susan	0.323	0.000	0.000	0
Rudbeckia subtomentosa	Sweet Blackeyed Susan	0.008	0.000	0.000	0.6875
Ruellia humilis	Wild Petunia	0.000	2.150	0.000	0
Rumex orbiculatus	Great Water dock	0.000	0.000	0.000	0.0125

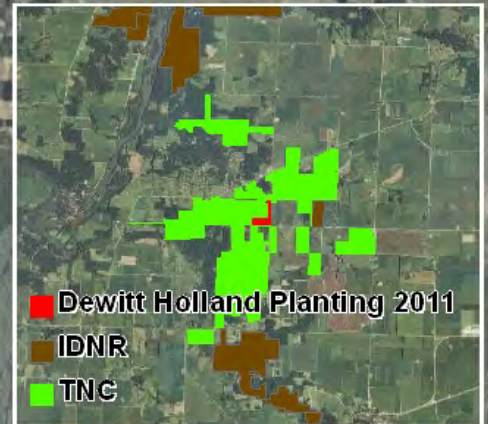
Scirpus atrovirens	Dark Green Rush	0.000	0.000	0.000	2.9875
Scutellaria parvula leonardi	Small Skullcap	0.000	0.200	0.000	0
Senecio pauperculus	Balsam Ragwort	0.036	0.000	0.000	0
Silphium integrifolium	Rosinweed	0.515	0.000	0.000	1.25
Silphium laciniatum	Compass plant	1.595	0.500	0.000	0
Silphium perfoliatum	Cup-plant	0.000	0.000	0.000	0.49375
Silphium terebinthaceum	Prairie Dock	1.620	0.000	0.000	1.25
Sisyrinchium albidum	Common Blue-eyed Grass	0.010	0.250	0.031	0
Solidago (Euthamia) graminifolia nuttallii	Grass-leaved Goldenrod	1.831	1.000	1.375	0
Solidago (Euthamia) gymnospermoides	Viscid Grass-leaved Goldenrod	0.000	0.000	0.000	0.48125
Solidago missouriensis fasciculata	Missouri Goldenrod	0.947	0.000	0.000	0
Solidago nemoralis	Gray Goldenrod; Oldfield	1.551	2.000	1.500	0
Solidago patula	Swamp Goldenrod	0.000	0.000	0.000	0.0375
Solidago rigida	Stiff Goldenrod	0.227	0.000	0.000	0
Solidago speciosa	Showy Goldenrod	0.321	0.400	0.000	0
Sorghastrum nutans	Indian Grass	0.000	0.000	0.000	0
Spartina pectinata	Prairie Cord Grass	0.298	0.000	0.000	1.7875
Spiranthes lacera	Slender Ladies Tresses	0.000	0.010	0.000	0
Sporobolus heterolepis	Prairie Dropseed	0.684	1.000	0.375	0
Stipa spartea	Porcupine Grass	0.000	0.500	0.063	0
Tephrosia virginiana	Goat's Rue	0.559	1.000	0.125	0
Thalictrum dasycarpum	Purple Meadow Rue	0.000	0.000	0.000	0.0625
Tradescantia ohiensis	Ohio Spiderwort	3.180	8.000	3.000	0
Triosteum perfoliatum	Horse Gentian (Feverwort)(Tinker's Weed)	0.213	0.000	0.000	0
Verbena hastata	Blue Vervain	0.000	0.000	0.000	5.41875
Verbena stricta	Hoary Vervain	0.343	0.500	0.000	0
Verbena urticifolia	Hairy White Vervain	0.042	0.000	0.000	0
Vernonia fasciculata	Common Ironweed	0.000	0.000	0.000	2.19375
Veronicastrum virginicum	Culver's Root	0.000	0.000	0.000	2.95
Viola pedata lineariloba	Birdsfoot Violet	0.000	0.000	0.050	0
Viola pedatifida	Prairie Violet	0.000	0.200	0.050	0
Viola sagittata	Arrow-leaved violet	0.000	0.000	0.000	0
Zizia aurea	Golden Alexanders	0.848	0.000	0.000	0.625
WET MIX 2011	14 species	0.000	0.000	0.000	2.925
Aster mix: smooth, sky blue		2.201	3.000	2.500	0
Wet mix remnant, Ast umb, iron wd, bottle gent, bone, seedbox, meadow beauty, bur marig, rushes,		0.000	0.000	0.000	0.3375

Dewitt Holland Planting 2011 - 50 Acres

Middle Rock River Conservation Area

Legend

- Planting #102 2010
- Doug Jr.
- Planting # 103 2011
- Dry Mesic
- Wet
- Dry Hill
- Exp. Harrow Strips
- Dropseed_Garden
- Exp. Rye Strips



Lowden Rd.

0 330 660 1,320 Feet

Stone Barn Rd.

Map made Cody Considine and Matt Gonperman 12/12/11

Path: T:\Nachusa Project\GIS Projects\Nachusa Office\Plantings\planting_#103_Holland_Crew_2011cc.mxd



Top photo is all 4 seeders planting the south quadrant. Bottom two photos show the Kubota with Vicor seeder pulling the small harrow and soil condition at the time of planting.

Lessons Learned

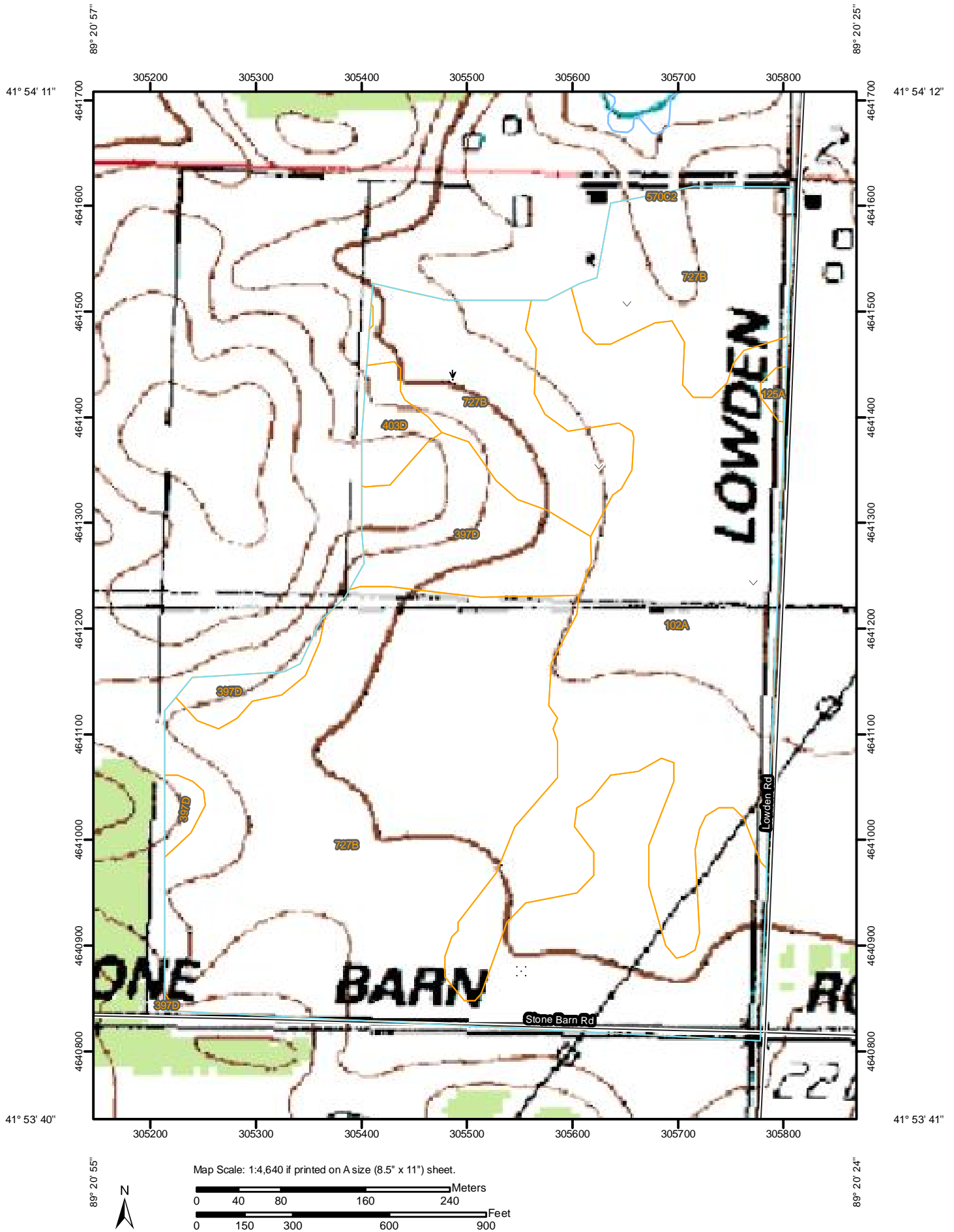
We planted 95% of the planting by Thanksgiving. We had favorable weather and did not have any major problems.

Give crew lots of responsibility with good direction and they will get the job done. Our crew this year was phenomenal. They took the initiative to figure out when seed was ready, where, and how much we needed to break records and they broke almost every record.

Do not burn pussy toes good collecting spots late in the burn season. Need to burn these areas early so pussy toes will produce seed.

The seed harvest sheets are a great tool to ensure you will bring in lots of diversity and thousands of pounds of seed.

Soil Map—Ogle County, Illinois
(Holland Planting)



Soil Map—Ogle County, Illinois
(Holland Planting)

MAP LEGEND






















Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Units

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



Gully



Short Steep Slope



Other

Political Features

Water Features



Streams and Canals

Transportation



Rails



Interstate Highways



US Routes



Major Roads



Local Roads

MAP INFORMATION

Map Scale: 1:4,640 if printed on A size (8.5" × 11") sheet.

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 accurate map measurements.

Source of Map: Natural Resources Conservation Service

Web Soil Survey URL: <http://websoilsurvey.nrcs.usda.gov>

Coordinate System: UTM Zone 16N NAD83

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 8, Jan 7, 2010



Map Unit Legend

Ogle County, Illinois (IL141)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
102A	La Hogue loam, 0 to 2 percent slopes	24.8	28.4%
125A	Selma loam, 0 to 2 percent slopes	0.2	0.3%
397D	Boone loamy fine sand, 7 to 15 percent slopes	7.2	8.3%
403D	Elizabeth loam, 10 to 18 percent slopes	1.4	1.6%
570C2	Martinsville silt loam, 5 to 10 percent slopes, eroded	0.0	0.0%
727B	Waukee loam, 2 to 5 percent slopes	53.6	61.5%
Totals for Area of Interest		87.2	100.0%