

Planting #62 – Hook Larson Prairie, East Field - Fall of 2004

35 acre crop field located in the Hook Larson Prairie Unit- SE1/4 of the NW1/4 Section 16.

History:

During the 2004 crop season the field was planted to Soybeans. This field has been in row crop ag for at least 15 years, and the 1964 aerial shows it as row crop.

The second week in November 35 lbs. of dry mix (included 44sp) was broadcast on all of the hill tops using the pendulum seeder. 500lbs of little bluestem was broadcast using the pendulum seeder over the entire 35-acres. The entire field was compacted using the cultipacker at the same time. (expect stripes of little blue – no foam marker was used)

Morning of December 16, 500 lbs. of dry mesic mix (included 67sp) was seeded using the Terra Gator Air Max spreader. (Seed was delivered to Royster Clark in Lanark where it was put into a mixer with potash and phosphate as a carrier). The field was covered twice by the air max both North to south and East to West to ensure coverage, See GIS maps. That afternoon 6lbs of thimble weed/little bluestem mix was broadcast using the Pendulum seeder and the entire field was cultipacked at the same time.

Additional Seed Planting Needed

20lbs Mesic Mix – (This was planted in the spring with the tractor. 8-2005)

15lbs forbs and conservative grasses (Not sure if we added this or not. 8-2005 BK)

TOTALS

29lbs/acre for grass and forbs

129 species

Gravel or Sand (Dry)		2004
SCIENTIFIC NAME	COMMON NAME	(lbs)
Amorpha canescens	Leadplant	1.8
Andropogon (Schizachyrium)	Little blue stem	
Anemone cylindrica	Thimbleweed	
Antennaria plantaginifolia	Pussy Toes	
Arenaria stricta	Stiff Sandwort	
Aristida purpurascens	Arrow Feather	0.3
Aronia prunifolia	Chokeberry	
Artemisia caudata	Beach Wormwood	0.09
Asclepias verticillata	Whorled milkweed	
Aster azureus (oolentangiensis)	Sky Blue Aster	
Aster ericoides	Heath Aster	0.08
Aster laevis	Smooth Blue Aster	
Aster linariifolius	Flax Leaved Aster	0.23
Aster linariifolius	Stiff Aster	
Aster oblongifolius	Aromatic Aster	0.3
Aster pilosus	Hairy aster	0.01
Aster sericeus	Silky aster	0.4
Aster sp.	Aster mix	
Astragalus canadensis	Canada Milk Vetch	
Baptisia leucantha	White Wild Indigo	3
Baptisia leucophaea	Cream Indigo	0.02
Bouteloua curtipendula	Side Oats	2.1

<i>Carex bicknellii</i>	Copper-shouldered oval Sedge	0.63
<i>Carex muhlenbergii</i> (enervis)	Sand Bracted Sedge	
<i>Carex pennsylvanica</i>	Common Oak Sedge	
<i>Carex</i> sp.	<i>Carex</i> sp.	
<i>Castilleja sessiliflora</i>	Downy yellow painted cup	0.2
<i>Ceanothus americanus</i>	New Jersey Tea	0.01
<i>Chrysopsis camporum</i>	Golden aster	0.13
<i>Comandra umbellata</i>	False Toadflax	
<i>Coreopsis palmata</i>	Prairie coreopsis	0.16
<i>Cyperus filiculmis</i>	Slender Sand Sedge	
<i>Danthonia spicata</i>	Poverty Oats	0.13
<i>Echinacea pallida</i>	Pale Purple Coneflower	3.55
<i>Euphorbia corollata</i>	Flowering Spurge	0.56
<i>Gentiana purberulenta</i>	Prairie gentian	
<i>Gnaphthium obtusifolium</i>	Sweet everlasting	0.3
<i>Helianthemum canadense</i>	Frostweed	
<i>Helianthus hirsuta</i>	Stiff Haired Sunflower	
<i>Helianthus occidentalis</i>	Western sunflower	0.35
<i>Heuchera richardsonii grayana</i>	Alum Root	0.01
<i>Hieracium gronovii</i>	Hairy hawkweed	0.04
<i>Juncus interior</i>	Inland Rush	0.01
<i>Koeleria cristata</i>	June Grass	1.24
<i>Krigia virginica</i>	Dwarf Dandelion	
<i>Kuhnia Eupatoides</i>	False Boneset	0.15
<i>Lechea tenuifolia</i>	Slender-leaved Pinweed	
<i>Lespedeza capitata</i>	Round Headed Bush Clover	1.73
<i>Liatris aspera</i>	Rough Blazing Star	2.3
<i>Liatris cylidracea</i>	Dwarf Blazingstar	
<i>Liatris cylindracea</i>	Cylindrical Blazing Star (Dwarf)	
<i>Linum sulcatum</i>	Grooved Yellow Flax	
<i>Lithospermum incisum</i>	Fringed Puccoon	
<i>Lupinus perennis</i>	Lupine	0.01
<i>Monarda punctata villicualis</i>	Horse mint	
<i>Opuntia humifusa</i>	Prickly Pear Cactus	0.03
<i>Oxalis violacea</i>	Violet Wood Sorrel	
<i>Panicum oligosanthos scribneria</i>	Scribner's Panic Grass	0.03
<i>Panicum</i> sp.	Panic grass	
<i>Panicum villosissimum</i>	White haired panic grass	
<i>Parthenium integrifolium</i>	Wild quinine	
<i>Paspalum ciliatifolium muhlenben</i>	Hairy lens grass	
<i>Penstemon hirsutus</i>	Hairy Beard Tongue	0.25
<i>Petalostemum</i> (Dalea) candidum	White prairie clover	0.03
<i>Petalostemum</i> (Dalea) purpureum	Purple prairie clover	2.39
<i>Polygala polygama obtusata</i>	Purple milkwort	
<i>Polygala sanguinea</i>	Field Milkwort	

Polygala sp.	Milkwort	
Potentilla arguta	Prairie Cinquefoil	0.48
Ratibida pinnata	Yellow Coneflower	
Rosa arkansana var. sulfata	Sunshine Rose	
Rosa carolina	Pasture rose	3.6
Rudbeckia hirta	Black-eyed Susan	0.24
Rudbeckia subtomentosa	Sweet black-eyed susan	
Silphium integrifolium	Rosinweed	
Silphium terebinthaceum	Prairie Dock	
Sisyrinchium albidum	Common Blue-eyed Grass	
Solidago gymnospermoides	Common grass leaved goldenrod	
Solidago missouriensis fasciculata	Missouri Goldenrod	
Solidago nemoralis	Old field Goldenrod	0.17
Solidago speciosa	Showy Goldenrod	1.74
Specularia perfoliata	Venus' looking glass	0.02
Sporobolus heterolepis	Prairie Dropseed	0.05
Sporobolus cryptandrus	Sand Dropseed	
Stipa spartea	Porcupine Grass	
Talinum rugospermum	Sand Fameflower	
Tephrosia virginiana	Goat's Rue	0.02
Tradescantia ohiensis	Spiderwort	0.36
Triosteum aurantiacum	Wild coffee	
Verbena stricta	Hoary Vervain	
Wulfenia bullii	Kittentail	0.09
Zizia aurea	Golden Alexander	
TOTAL SPECIES COLLECTED		44 Plants
TOTAL ESTIMATED POUNDS		29.34
ACTUAL BARREL WEIGHT (lbs)		35

Dry Mesic		2004
SCIENTIFIC NAME	COMMON NAME	(lbs)
Allium cernuum	Nodding Wild Onion	0.26
Amorpha canescens	Leadplant	9.6
Amorpha fruticosa	Indigo Bush	
Andropogon (Schizachyrium)	Little blue stem	
Anemone canadensis	Canada Anemone	
Anemone cylindrica	Thimbleweed	6
Anemone patens	Pasque Flowers	
Antennaria plantaginifolia	Pussy Toes	
Arenaria stricta	Stiff Sandwort	
Aristida purpurascens	Arrow Feather	0.9
Artemisia caudata	Wormwood	
Artemisia caudata (campestris)	Beach Wormwood	7.62
Artemisia ludouiciana gnaphalode	White Sage	
Asclepias verticillata	Whorled milkweed	0.25

<i>Aster azureus</i> (oolentangiensis)	Sky Blue Aster	
<i>Aster ericoides</i>	Heath Aster	2.18
<i>Aster laevis</i>	Smooth Blue Aster	
<i>Aster linariifolius</i>	Flax Leaved Aster	0.23
<i>Aster ptarmicoides</i>	Stiff Aster	0.25
<i>Aster oblongifolius</i>	Aromatic Aster	0.2
<i>Aster pilosus</i>	Hairy aster	0.1
<i>Aster sericeus</i>	Silky aster	1.1
<i>Aster</i> sp.	Aster mix	
<i>Astragalus canadensis</i>	Canada Milk Vetch	0.13
<i>Baptisia leucophaea</i>	Cream Wild Indigo	0.04
<i>Baptista leucantha</i>	White Wild Indigo	25.5
<i>Bouteloua curtipendula</i>	Side Oats Gramma	18.9
<i>Bouteloua hirsuta</i>	Mustache Grass	
<i>Cacalia atriplicifolia</i>	Pale Indian Plantain	
<i>Carex bicknellii</i>	Copper-shouldered oval Sedge	5.63
<i>Carex muhlenbergii</i> (enervis)	Sand Bracted Sedge	
<i>Carex pennsylvanica</i>	Common Oak Sedge	
<i>Carex</i> sp.	<i>Carex</i> sp.	
<i>Castilleja sessiflora</i>	Downy Yellow Painted Cup	0.05
<i>Ceanothus americanus</i>	New Jersey tea	0.03
<i>Chrysopsis camporum</i>	Golden Aster	0.06
<i>Coreopsis lanceolata</i>	Sand Coreopsis	
<i>Coreopsis palmata</i>	Prairie coreopsis	1.3
<i>Coreopsis tripteris</i>	Tall coreopsis	0.3
<i>Cyperus filicumis</i>	Slender Sand Sedge	
<i>Danthonia spicata</i>	Poverty Oats	0.13
<i>Desmodium canadense</i>	Showy tick trefoil	
<i>Desmodium illnoense</i>	Illinois tick trefoil	4.8
<i>Dodecatheon meadia</i>	Shooting Star	0.35
<i>Echinacea pallida</i>	Pale Purple Coneflower	69.89
<i>Elymus canadensis</i>	Canada wild rye	24.6
<i>Eryngium yuccifolium</i>	Rattlesnake master	1
<i>Eupatorium perfoliatum</i>	Common Boneset	
<i>Euphorbia corollata</i>	Flowering Spurge	2.25
<i>Gentiana andrewsii</i>	Bottle Gentain	
<i>Gentiana purberulenta</i>	Prairie gentian	x
<i>Genum triflorum</i>	Prairie Smoke	
<i>Gnaphaleum obtusifolium</i>	Sweet everlasting	2.7
<i>Helianthemum bicknellii</i>	Rock Rose	
<i>Helianthemum canadense</i>	Frostweed	
<i>Helianthus hirsuta</i>	Stiff Haired Sunflower	
<i>Helianthus occidentalis</i>	Western sunflower	3
<i>Helianthus rigidus</i>	Prairie Sunflower	
<i>Heliopsis helianthoides</i>	False sunflower	
<i>Heuchera richardsonii grayana</i>	Alum Root	0.01
<i>Hieracium gronovii</i>	Hairy Hawkweed	0.06
<i>Juncus</i> sp.	<i>Juncus</i> (Rushes)	0.05

<i>Koeleria cristata</i>	June Grass	12.14
<i>Kuhnia eupatoroides</i>	False boneset	0.6
<i>Lespedeza capitata</i>	Round-Headed Bush Clover	36.77
<i>Liatris aspera</i>	Rough Blazing Star	18.4
<i>Liatris cylindraceae</i>	Dwarf Blazing Star	0.25
<i>Liatris pycnostachya</i>	Gayfeather	0.06
<i>Linum sulcatum</i>	Grooved yellow flax	
<i>Lithospermum canescens</i>	Hoary Puccoon	
<i>Lithospermum incisum</i>	Fringed Puccoon	
<i>Lupinus perennis</i>	Lupine	
<i>Monarda fistulosa</i>	Wild Bergamot	4.8
<i>Monarda punctata villicualis</i>	Horse mint	1
<i>Oenothera biennis canescens</i>	Common Evening Primrose	
<i>Oenothera cleandii</i>	Sand evening primrose	
<i>Onosmodium hispidissimum</i>	Marbleseed	
<i>Opuntia macrohiza</i>	Prickly pear cactus	
<i>Oxalis videcea</i>	Violet Wood-sorel	
<i>Panicum oligosanthos scribneria</i>	Scribner's Panic Grass	0.28
<i>Panicum sp.</i>	Panic grass	
<i>Panicum villosissimum</i>	White Haired Panic Grass	
<i>Parthenium integrifolium</i>	Wild quinine	8.6
<i>Penstemon digitalis</i>	Foxglove Beard Tongue	12.5
<i>Penstemon grandiflorous</i>	Large- flowered Beard Tongue	
<i>Penstemon hirsutus</i>	Hairy Beard Tongue	0.38
<i>Penstemon pallidus</i>	Pale Beard Tongue	
<i>Petalostemum (Dalea) purpureum</i>	Purple prairie clover	21.3
<i>Petalostemum candidum</i>	White prairie clover	1.26
<i>Physocarpus opulifolius</i>	Ninebark	
<i>Polygala polygama obtusata</i>	Purple milkwort	
<i>Polygala sanguinea</i>	Field Milkwort	
<i>Polygala sp.</i>	Milkwort	
<i>Potentilla arguta</i>	Prairie Cinquefoil	7.15
<i>Pycnanthemum tenuifolium</i>	Narrow-leaved Mountain Mint	
<i>Pycnanthemum virginianum</i>	Mountain Mint	0.03
<i>Ratibida pinnata</i>	Yellow coneflower	2.63
<i>Rudbeckia hirta</i>	Black-eyed susan	4.24
<i>Rudbeckia subtomentosa</i>	Sweet black-eyed susan	
<i>Silphium integrifolium</i>	Rosin weed	1.79
<i>Silphium laciniatum</i>	Compass Plant	0.61
<i>Silphium perfoliatum</i>	Cup Plant	0.01
<i>Silphium terebinthaceum</i>	Prairie Dock	0.01
<i>Sisyrinchium albidum</i>	Blue-eyed grass	
<i>Smilax ecirrata</i>	Upright Carrion Flower	
<i>Solidago gymnospermoides</i>	Common Grass Leaved Goldenrod	1
<i>Solidago missouriensis fasciculata</i>	Missouri Goldenrod	x
<i>Solidago nemoralis</i>	Oldfield Goldenrod	2.9

Solidago speciosa	Showy Goldenrod	7.43
Specularia perfoliata	Venus' Looking Glass	0.01
Spiranthes cernua	Nodding Ladies tresses	
Sporobolus cryptandrus	Sand Dropseed	
Sporobolus heterolepis	Prairie dropseed	0.35
Stipa spartea	Porcuoine grass	
Tephrosia virginiana	Goat's Rue	0.04
Tradescantia ohiensis	Spiderwort	2.9
Triosteum aurantiacum	Wild coffee	2
Verbena hastata	Blue Vervain	
Verbena stricta	Hoary vervain	4
Veronica fasciculata	Ironweed	
Veronicastrum virginicum	Culver's Root	0.43
Wulfenia ballii	Kittentails	
Zizia aurea	Golden Alexander	
N/A (25 Species)	Knob Mixes	53
TOTAL SPECIES COLLECTED		67 Plants
TOTAL ESTIMATED POUNDS		398.34
ACTUAL BARREL WEIGHT (lbs)		502.18

Addendum notes of August 25, 2005 by BKleiman

We mowed the entire planting during the month of June, 2005. The horse weed and some ragweed was fairly tall, maybe thigh high. Then on August 18, 19, and 22, 2005 we mowed the entire planting a second time. This time the foxtail was thick and maybe thigh high.

Back in October 2004 we do go around the entire edge of the planting and Roundup the perennial grasses and weeds along the fencerows, and a few internal waterways to knock back the perennial weeds. This summer it was clear that this roundup did set the sod back which should help keep these weeds from moving into our planting.

We had a terrible drought this summer with the corn in the area severely wilted and stunted in growth. We assume many of our first year plants may have died from the drought. We plan to overseed the entire planting this winter with a mix of seed, likely using the AirMax truck seeder. Ryan Klopff made a list of plants from the planting. I can't remember if it was typed up but the species was something like 45, but that was before the drought began. We did hand plant thousands of porcupine grass on the highest areas a few days after harvesting that seed.

End.

Planting #62 – Hook Larson Prairie, Overseeding of East Field - Fall of 2005

Description: 35 acre 1 year old prairie planting located in Eastern part of the Hook Larson Prairie Unit- SE1/4 of the NW1/4 Section 16.

History: (see Planting #62)

Planting Mix Breakdown

Overseeding 2004 Planting #62 at HLP

MIX	ACRES	FORB		GRASS		TOTAL
		RATE #s/ac	TOTAL #s	RATE #s/ac	TOTAL #s	
DRY	15	2	30	0.93	13.95	44
MESIC	21	5	105	1.06	22.26	127
			135		36.21	171

Planting Description:

November 21 2005 Airmaxx spreader spread remaining mesic then dry mix on entire field at these low rates.

PLANTING INVENTORY LIST
NACHUSA GRASSLANDS

Planting #: 62
Planting Name: Hook Larson Prairie E
Approx Size: 35
Inventory Date: 9/24/2007
Recorders Names: Bill Kleiman, Lois Winkel
Time to Complete one hour
Data Entry: 9/24/07 by Bill Kleiman

1 = "Few" means saw 1-5 plants on walk
2 = "Common" means saw 6 to 24.
3 = "Abundant" means saw 25 to 50.
4 = "Super abundant means 51 and way

Overall comments on planting:

This planting is just finishing 3 summers. It has too much weedy Canada and Tall goldenrod, too much Bromis enermis, too much lawn grass which looks to be Poa compressa. We planted it at about 16 pounds of forbs and conservative grasses per acre and another 14 pounds of little bluestem so total was 30 pounds. We have been increasing what we call enough. It is about 45 total currently. We should have seeded heavier and should now overseed. The weedy goldenrods must have blown in or came in by human error on machines or by hand. The Bromis enermis & Poa may be from the farming practice with the plow pulling the seed around the field. Suggest soybeans in rotation with corn to know back grasses. Need to burn off the field before seeding. - Bill Kleiman

SCIENTIFIC NAME	COMMON NAME	FREQUENCY RATING
Alopecurus carolinianus	Annual foxtail	4
Ambrosia psilostachya coronopifolia	Western Ragweed	4
Elymus canadensis	Prairie Wild Rye	4
Penstemon digitalis	Foxglove Beardtongue	4
Poa compressa	Canada Blue Grass	4
Solidago canadensis	Canada Goldenrod	4
Achillea millefolium	Yarrow	3
Andropogon gerardii	Big Bluestem; Turkeyfoot	3
Andropogon (Schizachyrium) D479 sc	Little Bluestem	3
Aster pilosus	Hairy Aster	3
Bouteloua curtipendula	Side-Oats Grama	3
Bromus inermis	Smooth (Hungarian) Brome	3
Cirsium discolor	Pasture Thistle	3
Echinacea pallida	Pale Purple Coneflower	3
Helianthus grosseserratus	Sawtooth Sunflower	3
Koeleria cristata (macrantha)	Prairie June Grass	3
Monarda fistulosa	Wild Bergamot	3

Potentilla arguta	Prairie Cinquefoil	3
Ratibida pinnata	Yellow Coneflower	3
Rudbeckia hirta	Black-eyed Susan	3
Solidago rigida	Stiff Goldenrod	3
Solidago speciosa	Showy Goldenrod	3
Sorghastrum nutans	Indian Grass	3
Aster azureus (oolentangiensis)	Sky-blue Aster	2
Aster novae-angliae	New England Aster	2
Aster sericeus	Silky Aster	2
Bromus japonicus	Japanese Chess	2
Daucus carota	Queen Anne's Lace	2
Eupatorium altissimum	Tall Boneset	2
Kuhnia (Brickellia) eupatoroides corym	False Boneset	2
Parthenium integrifolium	Wild Quinine (Feverfew)	2
Pycnanthemum tenuifolium	Narrow-leaved Mountain Mint	2
Solidago nemoralis	Gray Goldenrod; Oldfield	2
Verbena stricta	Hoary Vervain	2
Alliaria petiolata (officinalis)	Garlic Mustard	1
Anemone cylindrica	Thimbleweed	1
Aster laevis	Smooth (Blue)(Silky) Aster	1
Aster linariifolius	Stiff Aster (Flax-Leaved)	1
Carex bicknellii	Copper-shouldered oval Sedge	1
Cirsium arvense	Canada Thistle	1
Coreopsis tripteris	Tall Coreopsis	1
Geum aleppicum strictum	Yellow Avens	1
Helianthus occidentalis	Western Sunflower; Naked S.	1
Heliopsis helianthoides	False Sunflower; " Ox-eye "	1
Heuchera richardsonii grayana	Rough Heuchera; Alum root	1
Lactuca canadensis	Wild Lettuce	1
Leonurus cardiaca	Motherwort	1
Lespedeza capitata --	Round-headed Bush Clover	1
Liatris pycnostachya	Tall Gayfeather; Prairie Blazing Star	1
Oenothera clelandii (rhombipetala)	Sand Evening Primrose	1
Polygonum tenue	Slender Knotweed	1
Prunus serotina	Wild Black Cherry	1
Quercus macrocarpa	Bur Oak	1
Rubus occidentalis	Black Raspberry	1

Rumex crispus	Curly Dock	1
Scrophularia marilandica	Late Figwort	1
Silphium integrifolium	Rosinweed	1
Silphium perfoliatum	Cup-plant	1
Solanum carolinense	Horse Nettle	1
Taraxacum officinale	Common Dandelion	1
TOTAL SPECIES		60