

Title and number of planting:

Planting 80 – Clear Creek Knolls Crew 1.6 Acres History – 2007

Date: November 21, 2007

This history will tell us all about our planting so that the restoration community, including us, can learn.

Author of this history: Bill Kleiman

Acreage of planting: 1.64 measured by a measuring wheel by Matt Fagan.

Site conditions:

Location: Township, Range Section and narrative. Taylor Township, T22N R9-10 E Section 10 in the southeast corner of the southwest corner of section 10. If the west line of the Sand Farm were extended north that line would be the east flank of the planting. The south flank of the planting is against Bruce and Ellen Scherger's. The north flank is against planting 63 the east flank is against planting 66.

Soil types: Give name and numbers and where the soils occur.

727B, Waukeean loam on 1 to 5 % slopes. Gently sloping well drained soil on uplands. This is the soil type for at least the south half of the planting. The north half of the planting may have 939C Rodman-Warsaw complex, 5 to 12% slope. This complex consists of sloping, well drained and excessively drained soils on upland kames and eskers and on stream terrace breaks. We planted the dry mesic mix which should be right.

Topographic features: Swale, drainage, sandy hill top...

Agricultural history: How long in row crops? At least for the last five decades the ground was in continuous row crops, mostly corn and soybean. Drainage tiles in the field? NO. Waterways installed in past? No. Aerials photos looked at to confirm history? June 1958 shows the planting as tilled row crops. Farmers consulted on history? Talked to Don Rogers, our tenant farmer, but not specifically about this piece of ground. Don has been the farmer for more or less the last two decades. Any fun stories to share? No.

Site Preparations:

What was last crop on land? Corn.

After harvest when was site mowed, burned, harrowed? The corn crop came about the last week of October, 2007. We batwing mowed the corn stubble by the last week of October and then we burned the corn stubble about at Halloween. I recall the corn stubble burning hot and smoky. We harrowed with a Furst chain harrow on Monday, November 19, 2007, the day of the planting. Mike Saxton harrowed the field one time. It looked nice and lightly crumbled on the surface like we want it.

What was weather like during this period? Dry up to that point. Who did field work? Mike Saxton, crew, Bill Kleiman supervised.

Seed planting:

How was seed planted? All but porcupine grass was tractor broadcast from a Vicon pendulum seed broadcaster mounted to a 30 hp Kubota tractor. What machine was used? If machine used, was a foam marker used? Yes. Foam marked worked well. Was seed applied once, twice in perpendicular directions? Seed was applied all in parallel lines. The foam lasted a long time. I made almost 4 passes. The foam marks were about 15 feet apart, and then I drove the tractor between the foam marks on the second pass, and towards the marks on the third pass. The fourth pass Austin Webb did and he said he got all the west half of the planting done before running out. Any carrier used with seed? No. What was weather like the week after planting? There was a heavy mist in the air which made me wet. On the next day there was a wonderful gentle drizzle which was barely noticeable in the rain guage. Today, Wednesday, it has been gently drizzling all day with a half inch accumulation in the rain guage. Which particular seeds were hand planted, and where? Mike Saxton hand planted two bundles of porcupine grass. He tossed them into the air and he reported that appeared to stick in the ground nicely. Who did the field work? Bill Kleiman, Mike Saxton.

Seed list:

Try to include weight per species. Definiety include total weight of various seed mixes. Does weight include chaff and stems? Yes. Note the bulk seed weight per acre for each area.

On this 1.64 acres we planted one mix, the dry-mesic crew mix of 2007. This was 82 pounds of bulk weight seed so the seed rate was 50 pounds per acre. This is a high to very high seed rate for this project. This mix has 104 species in it which also is very rich. Below is the excel seed crew list where I sorted by Dry mesic and deleted the other mixes. The totals in the list are for all the dry mesic seed mix, we took 82 pounds of this mix for this planting.

2007 Seed Harvest for crew

Showing Dry Mesic only

Scientific name	Common name	Total weight collected by crew	% that went to Dry Mesic mix	The weight of the entire dry mesic mix
Linum sulcatum	Groved Yellow Flax	0.01	30%	0.003
Allium cernuum	Nodding Wild Onion	5.18	50%	2.59
Amorpha canescens	Leadplant	23.85	70%	16.695
Amorpha fruticosa	Indigo Bush	0.95	60%	0.57
Andropogon (Schizachyrium) scoparium	Little Bluestem	36.5	60%	21.9
Anemone cylindrica	Thimbleweed	14.25	50%	7.125

Antennaria plantaginifolia	Pussy Toes (Everlasting)	1.05	50%	0.525
Apocynum cannabinum (X medium)	Dogbane (Indian Hemp)	0.05	30%	0.015
Aristida purpurascens	Arrow Feather	5.1	40%	2.04
Artemisia caudata (campestris)	Beach Wormwood	26.6	70%	18.62
Asclepias verticillata	Whorled Milkweed	6.4	70%	4.48
Aster azureus (oolentangiensis)	Sky-blue Aster	0.95	50%	0.475
Aster ericoides (prostratus)	Heath Aster	19.8	70%	13.86
Aster linariifolius	Stiff Aster (Flax-Leaved)	2.75	25%	0.6875
Aster oblongifolius	Aromatic Aster	0.05	50%	0.025
Aster sericeus	Silky Aster	1.5	50%	0.75
Astragalus canadensis	Canadian Milk Vetch	8.85	80%	7.08
Baptisia leucantha	White Wild Indigo	78.8	60%	47.28
Baptisia leucophaea	Cream Wild Indigo	30.45	40%	12.18
Bouteloua curtipendula	Side-Oats Grama	13.6	70%	9.52
Cacalia atriplicifolia	Pale Indian Plantain	1.3	20%	0.26
Carex bicknellii	Copper-shouldered oval Sedge	9.7	60%	5.82
Carex muhlenbergii (enervis)	Sand Bracted Sedge (Muhlenberg's)	1.8	40%	0.72
Ceanothus americanus	New Jersey Tea	4.2	70%	2.94
Chrysopsis camporum (Heterotheca)	Golden Prairie Aster	1.01	60%	0.606
Coreopsis lanceolata	Sand Coreopsis	0.5	20%	0.1
Coreopsis palmata	Prairie Coreopsis	6.2	50%	3.1
Coreopsis tripteris	Tall Coreopsis	14.35	40%	5.74
Cyperus filiculmis	Slender Sand Sedge	1.94	30%	0.582
Danthonia spicata	Poverty Oat Grass	1.5	20%	0.3
Desmodium illinoense	Ill. Tick Trefoil	7.8	55%	4.29
Dodecatheon meadia	Shooting Star	3.05	40%	1.22
Dougs mix		5.9	80%	4.72
dry mesic mix		9	100%	9
Echinacea pallida	Pale Purple Coneflower	198.9	70%	139.23
Elymus canadensis	Prairie Wild Rye	14.3	60%	8.58
Eragrostis spectabilis	Purple Love Grass	1.43	50%	0.715
Erigeron strigosus	Daisy Fleabane	0.65	50%	0.325
Eryngium yuccifolium	Rattlesnake Master	23.94	20%	4.788
Euphorbia corollata	Flowering Spurge	15.65	60%	9.39
Gentiana (alba) flavida	Cream Gentian	0.3	30%	0.09
Gnaphalium obtusifolium	Sweet Everlasting (Old-Field Balsam)	8.05	50%	4.025
Helenium autumnale	Sneezeweed	0.2	10%	0.02
Helianthemum bicknellii	Rock Rose	0.05	70%	0.035
Helianthemum canadense	Common Rockrose (Frostweed)	1.35	40%	0.54
Helianthus mollis	Hairy Sunflower	0.3	70%	0.21
Helianthus occidentalis	Western Sunflower; Naked S.	10.7	60%	6.42
Helianthus rigidus (laetiflorus)	Prairie Sunflower	0.95	60%	0.57
Heliopsis helianthoides	False Sunflower; " Ox-eye "	3.15	60%	1.89
Heuchera richardsonii grayana	Rough Heuchera; Alum root	0.25	50%	0.125
Hieracium gronovii	Hairy Hawkweed	0.3	50%	0.15
Houstonia (Hedyotis) longifolia	Long-Leaved Bluets	0.06	50%	0.03

(canadense)				
Isanthus (Trichostema) brachiatus (m)	False Pennyroyal	0.4	40%	0.16
Juncus greenei	Greene's Rush	5.7	50%	2.85
Juncus tenuis	Path Rush	0.1	60%	0.06
Koeleria cristata (macrantha)	Prairie June Grass - 54.65	24.55	60%	14.73
Kuhnia (Brickellia) eupatoroides corymbulosa	False Boneset	8.05	60%	4.83
Lechea tenuifolia	Slender-Leaved Pinweed	0.25	30%	0.075
Leptoloma cognatum	Fall Witch Grass	5.4	60%	3.24
Lespedeza capitata --	Round-headed Bush Clover	55.9	60%	33.54
Liatris aspera	Rough Blazing-star (Rough Gayfeather)	19.5	55%	10.725
Liatris pycnostachya	Tall Gayfeather; Prairie Blazing Star	7.1	10%	0.71
Lithospermum incisum	Fringed (Narrow-leaved) Puccoon	0.05	50%	0.025
Lobelia spicata	Pale-spike Lobelia	0.2	10%	0.02
Lupinus perennis	Wild Lupine	0.3	40%	0.12
Monarda punctata villicualis	Horse Mint	13.85	70%	9.695
Oenothera biennis canescens	Common Evening Primrose	13.15	60%	7.89
Oenothera clelandii (rhombipetala)	Sand Evening Primrose	0.25	40%	0.1
Onosmodium hispidissimum	Marbleseed	0.4	50%	0.2
Panicum oligosanthos scribneria	Scribner's Panic Grass	1.9	50%	0.95
Parthenium integrifolium	Wild Quinine (Feverfew)	32	50%	16
Paspalum ciliatifolium muhlenbergii	Hairy Lens Grass	0.45	50%	0.225
Pedicularis canadensis	Wood Betony	0.5	30%	0.15
Penstemon grandiflorus	Large Flowered Beardtongue	0.5	70%	0.35
Penstemon hirsutus	Hairy Beard tongue	0.85	30%	0.255
Petalostemum (Dalea) candidum	White Prairie Clover	32	30%	9.6
Petalostemum (Dalea) purpureum	Purple Prairie Clover	48.2	70%	33.74
Petalostemum foliosum	Leafy Prairie Clover	0.1	100%	0.1
Physocarpus opulifolius	Ninebark	0.9	5%	0.045
Polygala sanguinea	Field Milkwort	0.2	50%	0.1
Polygonum tenue	Slender Knotweed	3.7	70%	2.59
Potentilla arguta	Prairie Cinquefoil	23.7	50%	11.85
Pycnanthemum virginianum	Mountain mint (Prairie Hyssop)	27.85	20%	5.57
Rosa carolina	Pasture Rose	12.55	60%	7.53
Rudbeckia hirta	Black-eyed Susan	8.9	35%	3.115
Rudbeckia subtomentosa	Sweet Blackeyed Susan	9.7	10%	0.97
Scrophularia marilandica	Late Figwort	1.11	5%	0.0555
Silphium integrifolium	Rosinweed	35	60%	21
Silphium laciniatum	Compass plant	7.9	60%	4.74
Silphium perfoliatum	Cup-plant	5.15	10%	0.515
Silphium terebinthaceum	Prairie Dock	2	40%	0.8
Sisyrinchium albidum	Common Blue-eyed Grass	0.4	60%	0.24
Solidago (Euthamia) graminifolia	Viscid Bushy Goldenrod	5.15	25%	1.2875
Solidago (Euthamia) graminifolia nuttallii	Grass-leaved Goldenrod	4.75	25%	1.1875
Solidago (Euthamia) gymnospermoides	Viscid Grass-leaved Goldenrod	24.65	60%	14.79

Solidago missouriensis fasciculata	Missouri Goldenrod	1.65	60%	0.99
Solidago nemoralis	Gray Goldenrod; Oldfield	5	60%	3
Solidago rigida	Stiff Goldenrod	5.9	60%	3.54
Solidago speciosa	Showy Goldenrod	17.25	50%	8.625
Sporobolus heterolepis	Prairie Dropseed	1.85	10%	0.185
Stipa spartea	Porcupine Grass	1.3	20%	0.26
TCP south planting		307.05	80%	245.64
Tephrosia virginiana	Goat's Rue	17.2	50%	8.6
TOTALS		1427.93		880.517
Tradescantia ohiensis	Ohio Spiderwort	9.5	65%	6.175
Triosteum perfoliatum	Horse Gentian (Feverwort)(Tinker's Weed)	1.4	60%	0.84
Zizia aptera	Heart-leaved Meadow Parsnip	0.4	50%	0.2
Zizia aurea	Golden Alexanders	12.5	30%	3.75

Map:

Should have clear legend and boundary marking.

Lessons learned:

Vicon was putting out a lot of dust from the agitator in the hopper. This would blow all over yours truly. I had Mike Saxton pick up some plexiglass and a piano hinge. I made a quick hinged lid that works to keep the dust way down.

Follow up notes on first few years:

This should be a narrative where you include the date of each note and who wrote the note. Describe follow up work like mowing, weeding and over-seeding. If you oversee it would be nice to have the species list and weights, especially if that addition is of significant proportion.

Planting inventories:

When planting inventories or other vegetation work are done it would be good to note where this data is stored, or copy it into this document.

End.