Title and number of planting: Dot & Doug Wade Prairie 2006 Planting #69

Author of this history: Alan Meier

Revision Date: 04/05/2016

Site conditions:

Location: Ogle County, Township 22N, Range 10E, Section 16. This planting is approximately six acres in size. The western, northern, and eastern boundaries are all straight lines. The southern boundary is irregular. The coordinates of the boundary corners are:

southwest corner: N 41°53"28.0', W 089°21"20.4' northwest corner: N 41°53"30.2', W 089°21"12.5' northeast corner: N 41°53"30.1', W 089°21"12.2' southeast corner: N 41°53"24.4', W089°21"12.6'

The site is bordered by Doug's Knob on the southeast, the Shabonna Savannah on the south, a remnant prairie north of Potawatomi Ridge on the southwest, a heavily wooded area on the west (off preserve), a cornfield on the north (2007 planting), Dot's Knob on the northeast, and the Dot & Doug Wade Prairie 1994 restoration on the east.

Soil types: According to the Ogle County Soil Study, soils include

#727B Waukee loam, 1 to 5 percent slopes – gently sloping, well drained soils on uplands and slightly elevated terraces along streams

Topographic features: The planting is quite flat, with no more than a few feet difference in elevation from one end the planting to the other. The planting is at the southern section of a 30 acre field that slopes downward from north to south. In the middle section of the planting is an area running north to south that is somewhat more mesic than the rest of the planting. This wetter area is fed by a drainage that runs all the way from Stone Barn Road to the north.

Site History

This planting probably had been in row crop production from at least 1939 until 1994. The 1939 aerial photo is a little dark over this area, but it appears to already be in row crops. The 1958 aerial clearly shows that the planting was in row crops at that time and continuously until 1994, when Bill Kleiman, Kevin Kaltenbach, and a few other stewards spread combine mix, not hand-collected mix, over the entire field that includes this planting. The mix contained mostly little bluestem. They did not plant enough seed, nor did they cover the planting evenly. They had expected to add more seed, but ran out. This planting did poorly, filling in with cool season grasses, some native prairie plants, and a lot of Rubus, invasive honeysuckle, and box elder seedlings from the fence line to the

west.

Bill soon wanted to put the site back in corn, but Gene St. Louis, the unit's steward, decided to over-seed it instead. The field languished for a decade. It was mowed once or twice a year to knock down the woody plants. Gene over-seeded a good mix of species, but there was no apparent improvement. After several years of over-seeding, Bill had a farmer spray the area in the fall with a mix of Crossbow and Roundup. Then the farmer plowed it and planted corn in the spring. The corn was in this planting for three years.

Site Preparations:

After the 2006 corn crop was harvested, the corn stubble was mowed and then burned off on November 20, 2006. Later that week, the field was harrowed. The field was not harrowed again after the seed planting was completed.

Seed planting:

Planting was performed by Alan Meier, steward of the Dot & Doug Wade Prairie.

Seed planting began on November 27. The seed was mixed in the middle of the planting prior to spreading the seed. The majority of the seed was planted using a pendulum seed broadcaster attached to a small Kubota tractor. Two full passes of the planting were made on November 27 using settings on the broadcaster of 12 and 15. Seed barrels were used to mark the areas where the seed was being sown. That night there was an extremely heavy rainfall, and much of the planting was too wet for the tractor that next day. So on November 28, Illinois Tick Trefoil, Whorled Milkweed, and Thimbleweed were broadcast by hand.

On December 1, a ten inch snowfall blanketed the area. On December 9, the pendulum seed broadcaster attached to the Kubota tractor was again used for broadcasting the remaining seed mix on a rapidly melting snow-cover. Three additional passes of the entire planting were completed that day using settings of 18, 24, and 27 on the spreader. Due to the snow-cover, there was no need to mark the areas that had been seeded that day. The total of five passes over the planting between the two days when the tractor was used ensured a very uniform distribution of the seed.

On December 16 and 17 additional hand-planting of seed was performed, including the inserting of 1200 porcupine grass seeds into the earth. Also, 9 Wild Plum (*Prunus Americana*) plants provided by Chris and Jennifer Hauser were planted.

Seed list:

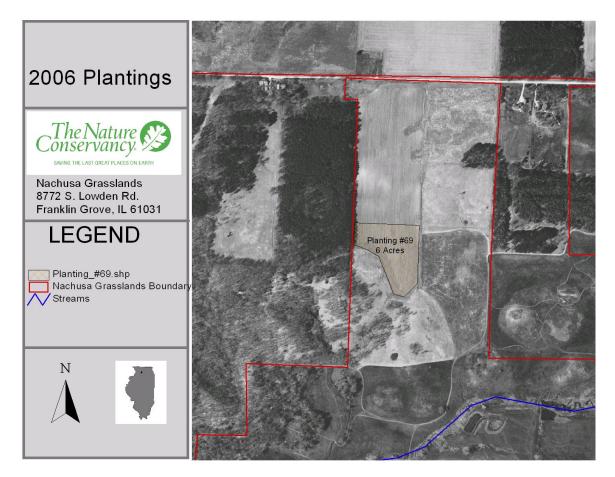
Approximately 314 pounds of seed (including chaff and stems) were planted. A total of 128 species were included. Most of the seed was hand-harvested by Alan and Mary Meier. 77 pounds of the seed were picked in the 2005 season and held over. The remaining 236 pounds were harvested in 2006. The mix included 24 pounds of little bluestem which was machine harvested by the crew. The bulk seed per acre average was 52.33 pounds.

Scientific Name	Common Name	Weight
Agrostis hymenalis	Tickle Grass	0.05
Allium cernuum	Nodding Wild Onion	0.75
Amelanchier leavis	Allegheny Shadblow	0.09
Amorpha canescens	Lead Plant	11.78
Amorpha fruticosa	Indigo Bush	0.35
Anaphalis margaritacea	Pearly Everlasting	0.10
Andropogon (Schizachyrium)	Little Bluestem	24.20
scoparium		
Anemone canadensis	Meadow Anemone	0.01
Anemone cylindrica	Thimbleweed	1.35
Antennaria neglecta	Field Cat's Foot	0.25
Antennaria plantaginifolia	Pussy Toes	0.25
Aristida purpurascens	Three-awn grass	0.55
Aronia (Pyrus) prunifolia	Black Chokeberry	0.10
Artemisia caudata (campestris)	Beach Wormwood	0.55
Asclepias verticallata	Whorled milkweed	0.25
Aster azureus (oolentangiensis)	Sky-blue Aster	4.60
Aster ericoides	Heath Aster	5.96
Aster laevis	Smooth Aster	0.15
Aster linariifolius	Flax-leaved aster	0.01
Aster linariifolius	Stiff Aster	0.70
Aster novae-angliae	New England Aster	0.41
Aster oblongifolius	Aromatic Aster	2.40
Aster ptarmicoides	White Aster (Stiff Aster)	0.01
Aster sericeus	Silky Aster	4.55
Astragalus canadensis	Canada Milk Vetch	4.65
Baptisia leucantha	White Wild Indigo	24.39
Baptisia leucophaea	Cream Wild Indigo	6.72
Bouteloua curtipendula	Side Oats Gramma	1.16
Bouteloua hirsuta	Moustache Grass	0.01
Cacalia atriplicifolia	Pale Indian Plantain	3.00
Carex bicknellii	Bicknell's sedge	2.65
Carex muehlenbergii	Muhlenberg's sedge	0.81
Chrysopsis camporum (Heterotheca)	Golden Prairie Aster	0.18
Cirsium hillii	Hill's Thistle	0.02
Comandra umbellata	False Toadflax	0.19
Coreopsis lanceolata	Sand Coreopsis	0.02

Coreopsis palmata	Prairie Coreopsis	1.20
Coreopsis tripteris	Tall Coreopsis	0.86
Cyperus filiculmis	Slender Sand Sedge	0.08
Desmodium canadense	Showy Tick Trefoil	0.00
Desmodium illinoense	Illinois Tick Trefoil	1.10
Dodecantheeon meadia	Shooting Star	2.75
Echinacea pallida	Pale Purple Coneflower	40.95
Elvmus canadensis	Canada Wild Rye	5.00
Eragrostis spectabilis	Purple Love Grass	0.15
Eryngium yuccifolium	Rattlesnake Master	8.85
Eupatorium altissimum	Tall Boneset	1.20
Euphorbia corollata	Flowering Spurge	3.95
Gaura biennis pitcheri (longiflora)	Common Gaura	0.05
Gentiana puberulenta	Prairie Gentian	0.03
Geum triflorum	Prairie Smoke	0.24
Helianthemum canadense	Frostweed	0.03
Helianthus occidentalis	Western Sunflower	1.75
Helianthus rigidus (laetiflorus)	Prairie Sunflower	0.30
Heliopsis helianthoides	False Sunflower	1.12
Heuchera richardsonii grayana	Alum Root	0.05
Hieracium longipilum	Hairy Hawkweed	0.00
Houstonia (Hedyotis) longifolia	Long-Leaved Bluets	0.40
(canadense)	Long-Leaved Didets	0.02
Hypericum spaerocarpum	Round-fruited St. Johnswort	0.05
Juncus greenei	Greene's Rush	2.28
Koeleria cristata (macrantha)	Prairie June Grass	3.76
Krigia virginica	Dwarf Dandelion	0.05
Kuhnia (Brickellia) eupatorioides	False Boneset	1.73
Lechea stricta	Bushy Pinweed	0.20
Lechea tenuifolia	Slender-Leaved Pinweed	0.20
Lechea villosa (mucronata)	Hairy Pinweed	0.60
Lespedeza capitata	Round-headed Bush Clover	13.15
Liatris aspera	Rough Blazing Star	14.63
Liatris cylindracea	Dwarf Blazingstar	0.13
Liatris pycnostachya	Prairie Blazing Star	0.65
Linum sulcatum	Grooved Yellow Flax	0.10
Lithospermum incisum	Fringed Puccoon	0.05
Lobelia spicata	Pale-spiked Lobelia	0.05
Lysimachia lanceolata	Lance-Leaved Loosestrife	0.05
Monarda fistulosa	Wild Bergamot	0.60
Onosmodium hispidissimum	Marbleseed	0.05
Opuntia humifusa (compressa)	Prickly Pear Cactus	0.95
Oxalis violacea	Violet Wood Sorrel	0.20
Panicum oligosanthes	Scribner's Panic Grass	1.80
Panicum villosissimum	White-haired Panic Grass	0.15
Parthenium integrifolium	Wild Quinine	7.78
Paspalum ciliatifolium muhlenbergii	Hairy Lens Grass	0.01
Penstemon digitalis	Foxglove Beard Tongue	3.85

Penstemon hirsutus	Hairy Beard tongue	0.01
Petalostemum (Dalea) candidum	White Prairie Clover	1.00
Petalostemum (Dalea) purpurea	Purple Prairie Clover	15.50
Polygala incarnata	Pink Milkwort	0.01
Polygala polygama obtusata	Purple Milkwort	0.01
Polygala sanguinea	Field Milkwort	0.04
Polygonum tenue	Slender Knotweed	0.01
Potentilla arguta	Prairie Tall Cinquefoil	3.93
Prunus americana (9 plants)	Wild Plum	0.09
Pseudognaphalium obtusifolium	Sweet Everlasting	0.41
Pycnanthemum tenuifolium	Slender Mountain Mint	3.14
Pycnanthemum virginianum	Common Mountain Mint	0.43
Quercus macrocarpa	Bur oak	0.85
Rosa blanda	Early Wild Rose	0.05
Rosa carolina	Pasture Rose	3.00
Rudbeckia hirta	Black-eyed Susan	0.63
Rudbeckia subtomentosa	Sweet Black Eyed Susan	1.63
Ruellia humilis	Wild Petunia	0.10
Scrophularia lanceolata	Early Figwort	0.30
Scutellaria parvula leonardi	Small Skullcap??	0.01
Senecio plattensis	Prairie Ragwort	0.30
Silphium integrifolium	Rosin Weed	4.85
Silphium laciniatum	Compass Plant	8.38
Silphium perfoliatum	Cup Plant	0.61
Silphium terebinthinaceum	Prairie Dock	0.84
Sisyrinchium albidum	Common Blue-eyed Grass	0.10
Solidago grammifolia	Grass-Leaved Goldenrod	4.35
Solidago missouriensis	Missouri Goldenrod	3.46
Solidago nemoralis	Old Field Goldenrod	3.71
Solidago speciosa	Showy Goldenrod	4.18
Sporobolus heterolepis	Prairie Dropseed	0.40
Stipa spartea	Porcupine Grass	0.30
Talinum rugospermum	Sand Fameflower	0.01
Tephrosia virginiana	Goat's Rue	2.51
Teucrium canadense	American Germander	0.20
Tradescantia ohiensis	Common Spiderwort	3.05
Triosteum aurantiacum	Orange-fruited Horse Gentian (Wild Coffee)	1.75
Verbena stricta	Hoary vervain	3.10
Verbena urticifolia	White Vervain	0.95
Veronicaastrum virginicum	Culver's Root	1.03
Viola pedata	Birdsfoot Violet	0.04
Viola sagittata	Arrow-leaved Violet	0.09
Wulfenia bullii (Besseya)	Kittentails	1.25
Zizia aptera	Heart-leaved Meadow Parsnip	0.10
Zizia aurea	Golden Alexander	1.43
		1.10
	Total item weight	304.97

Map:



Lessons learned:

A setting of 12 is too low on the pendulum broadcast spreader. Although a very thorough and even spread of the seed was accomplished by making 5 complete passes, an excessive amount of time was taken to complete the mechanical portion of the planting. A setting of 15 or 18 done in 3 passes is probably better

2007 Follow up notes

In June of 2007 a flat of Arrow-leaved violets (*Viola sagittata*) plugs were handplanted in the planting and were water by hand for a couple of weeks.

2008 Follow up notes

The planting had large numbers of prairie plants appearing, but also had problems with undesirable species including, yarrow, Canada goldenrod, sweet clover, Queen Anne's lace, and Canada Thistle. Al and Mary Meier swept the planting several times removing the sweet clover, Queen Anne's lace, and Canada Thistle.

Box Elder seedlings were also a problem, with large numbers of them being removed, especially near the western boundary of the planting.

The planting was over-seeded in 2008 with 162 lbs. of seed. The seeds were divided into three different mixes, plus some seeds were individually hand planted rather than being put in a mix. Prior to over-seeding, the planting was mowed by John Schmadeke. On November 22, 2008, Al and Mary Meier, and temporary crew member, Ian Kenney, foot-smear planted the dry-mesic mix in the eastern and western sections of the planting. On December 12, 2008, Al used the pendulum broadcast spreader attached to the Kubota tractor to distribute the general and mesic seed mixes over a couple inches of melting snow. The general mix was spread over the entire planting. The mesic mix was applied to the middle corridor of the planting running north to south. On December 28, 2008, Al and Mary Meier carefully raked in the hand plant items. The complete list of seeds is shown below.

Scientific Name	Common Name	Weight	Mi
		(lbs)	X
Allium cernuum	Nodding Wild Onion	0.35	G
Amorpha canescens	Lead Plant	10.20	D
Amorpha fruticosa	Indigo Bush	0.20	М
Andropogon gerardii / Sorghastrum nutans	Big Bluestem/Indian Grass mix	4.00	G
Anemone canadensis	Meadow Anemone	0.20	M
Anemone cylindrica	Thimbleweed	1.35	G
Antennaria plantaginifolia	Pussy Toes	1.33	G
	Arrow Feather (three-awn	0.80	U
Aristida purpurascens	grass)	0.80	G
Asclepias verticallata	Whorled milkweed	0.15	G
Aster linariifolius	Stiff Aster	1.35	D
Baptisia leucantha	White Wild Indigo	9.35	G
Baptisia leucophaea	Cream Wild Indigo	14.35	D
Bouteloua curtipendula	Side Oats Gramma	0.80	G
Cacalia suaveolens	Sweet-scented Indian Plantain	0.05	М
Carex bicknellii	Bicknell's sedge	0.10	G
Comandra umbellata	False Toadflax	0.10	D
Coreopsis palmata	Prairie Coreopsis	4.85	G
Coreopsis tripteris	Tall Coreopsis	0.35	М
Desmodium illinoense	Illinois Tick Trefoil	0.35	G
Echinacea pallida	Pale Purple Coneflower	9.95	G
Eryngium yuccifolium	Rattlesnake Master	2.95	М
Euphorbia corollata	Flowering Spurge	3.05	G
Gentiana (alba) flavida	Cream Gentian	0.12	Н
Gentiana puberulenta	Prairie Gentian	0.10	Н
Helianthemum canadense	Common Rockrose	0.65	
	(Frostweed)		D
Helianthus occidentalis	Western Sunflower	4.65	G

Helianthus rigidus (laetiflorus)	Prairie Sunflower	0.10	G
Heliopsis helianthoides	False Sunflower	0.55	G
Hieracium longipilum	Hairy Hawkweed	0.25	D
Juncus greenei	Greene's Rush	0.40	G
Koeleria cristata (macrantha)	Prairie June Grass	1.65	G
Kuhnia (Brickellia) eupatorioides	False Boneset	2.20	G
Lechea tenuifolia	Slender-Leaved Pinweed	0.95	D
Lespedeza capitata	Round-headed Bush Clover	3.65	G
Liatris aspera	Rough Blazing Star	16.10	G
	Prairie Blazing Star, Tall	5.20	
Liatris pycnostachya	Gayfeather		G
Linum sulcatum	Grooved Yellow Flax	0.10	D
Panicum oligosanthes	Scribner's Panic Grass	0.70	G
Parthenium integrifolium	Wild Quinine	10.25	G
Petalostemum (Dalea) candidum	White Prairie Clover	1.40	D
Petalostemum (Dalea) purpurea	Purple Prairie Clover	5.95	D
Potentilla arguta	Prairie Tall Cinquefoil	2.60	G
Pycnanthemum tenuifolium	Slender Mountain Mint	1.10	G
Pycnanthemum virginianum	Common Mountain Mint	1.35	М
Rosa carolina	Pasture Rose	1.70	G
Rudbeckia subtomentosa	Sweet Black Eyed Susan	1.80	М
Salix humilis	Prairie Willow	0.10	М
Schizachyrium scoparium	Little Bluestem	12.00	G
Silphium integrifolium	Rosin Weed	1.10	G
Silphium laciniatum	Compass Plant	1.05	G
Silphium perfoliatum	Cup Plant	3.95	М
Silphium terebinthinaceum	Prairie Dock	0.45	G
Tephrosia virginiana	Goat's Rue	6.70	D
Triosteum aurantiacum	Orange-fruited Horse Gentian	0.75	G
Veronicaastrum virginicum	Culver's Root	3.60	М
Viola pedata	Birdsfoot Violet 0.1		D
Zizia aurea	Golden Alexander	2.90	G
	Total item weight	162.32	

Mixes:

G = General, M = Mesic, D = Dry Mesic, H = Handplant

2010 Follow up notes

The planting was burned for the first time on 3/17/2010. The burn was very thorough over the entire planting.

The planting still suffers from large amounts of Canada Goldenrod, especially in the band running north to south through the central portion of the planting and the entire east central part of the planting.

On November 29, 2010, another burn of this planting was attempted at the same time as the burn of the corn stubble for the Dot & Doug Wade Prairie 2010 Planting #99 to the north. The planting burned very poorly with less than ten percent of the area successfully burning.

2011 Follow up notes

On January 2, 2011, Mary and Al Meier spread 5.5 lbs of Little Bluestem (*Andropogon (Schizachyrium) scoparium*) seed in just the areas that had burned in November and along the edges of the planting. Also, a 14.5 lbs seed mix, comprised of asters (*Aster azureus* and *Aster laevis*), round-headed bush clover (*Lespedeza capitata*), slender mountain mint (*Pycnanthemum tenuifolium*), and white indigo (*Baptisia leucantha*) was broadcast along the weedy eastern edge of both the 2006 and 2007 plantings, between the plantings and the two-track.

On April 12, 2011, a burn of the planting was attempted again. This time the entire western side and northeastern corner of the planting were thoroughly burned. The southern half of the planting also burned, but not as thoroughly. The entire middle and east-central part of the planting did not burn at all. A total of approximately fifty percent of the planting burned in either the November, 2010 or April, 2011 burns.

On April 13, 2011, Al Meier spread 16 lbs of Little Bluestem (*Andropogon* (*Schizachyrium*) scoparium) seed in the areas that had been burned the previous day.

Scientific Name	Common Name	Weight (lbs)	Date Planted	Comments
	Ivanic	(103)	Tanteu	
Antennaria neglecta	Field Cat's	0.02	6/12/2011	planted NE
	Foot			corner
Antennaria plantaginifolia	Pussy Toes	0.38	6/12/2011	planted NE
				corner
Oxalis violacea	Violet Wood	0.05	6/24/2011	planted NE
	Sorrel			corner
Sporobolus heterolepis	Prairie	1.30	12/17/2011	
	Dropseed			
Veronicaastrum virginicum	Culver's Root	1.15	11/27/2011	
Viola sagittata	Arrow-leaved	0.01	6/24/2011	planted NE
	Violet			corner
	Total weight	2.91		

The following seeds harvested in 2011 were planted:

2012 Follow up notes

The planting was burned in March 2012. The burn was very thorough over the entire planting.

Scientific Name	Common Name	Weight	Comments
Andropogon gerardii	Big Bluestem	3.85	hand-harvested
Panicum virgatum	Prairie Switch Grass	0.20	
	Total seed weight	4.05	

The following seeds were spread in this planting in November, 2012:

2013 Follow up notes

The planting was burned in March 2013. The burn was very thorough over the entire planting.

2014 Follow up notes

The planting was burned on March 29, 2014. The central portion of the planting did not burn thoroughly.

The following seeds were broadcast in this planting in November, 2014:

Scientific Name	Common Name	Weight
Amorpha canescens	Lead Plant	6.35
Andropogon gerardii	Big Bluestem	0.30
Aster ericoides	Heath Aster	2.00
Helianthus occidentalis	Western Sunflower	4.25
Lespedeza capitata	Round-headed Bush Clover	2.85
Lupinus perennis	Wild Lupine	2.25
Potentilla arguta	Prairie Tall Cinquefoil	1.30
Solidago grammifolia	Grass-Leaved Goldenrod	4.50
Sporobolus heterolepis	Prairie Dropseed (cut)	6.00

2015 Follow up notes

The planting was burned in the spring of 2015.

The western, southern, and northeastern sections of this planting continue to improve, and the Canada Goldenrod in these areas has diminished significantly. The central and east central portions of the planting are still dominated by Canada Goldenrod. Large numbers of pale purple coneflowers, wild quinine, and other conservative species flowered this year and the seeds of most species were allowed to drop in order to continue to improve the planting. Red clover and sweet clover are the main species that we work to control.

2016 Follow up notes

The planting was burned in March 2016. The burn was very thorough over the entire planting.

On April 1, 2016 33.6 lbs of hand-picked seeds, representing 77 species were distributed over the central part of the planting by stewards Al and Mary Meier and Keith Kauffmann. This is the area that still has some of the greatest concentration of weedy goldenrods. Please refer to the 2015 Follow up notes for the 2012 Planting #106 for a complete list of the species included in that mix.