

Gobbler Ridge – Planting #83 (2008) Updated for 2009
By Bernie Buchholz 12/8/09

1. Serious erosion due to grade change and heavy rains, primarily on first 25 meters along east edge; ruts 8” deep/14” wide and up to 10 meters long; poor germination in this area and the first 20 meters along the south edge abutting FFK; throughout most of the planting the number of juveniles appeared well below the 3 prior plantings.
2. Large numbers of Queen Ann’s lace and yarrow, possibly attributable to FFK seed source; low profile clovers are also plentiful; Cindy and I cut and painted with herbicide ~2,500 such weeds; many yarrow still visible.
3. Strikingly high number of juvenile lead plants (Amo can)
4. May have seen a few New Jersey tea (Cea ame) and aromatic sumac (Rhu aro) juveniles
5. Heavy overseeding of erosion area

GOBBLER RIDGE - PLANTING #83 (2008) prepared by
Bernie Buchholz 2/21/09

1. Location & Conditions: 7.0 acres immediately west of Planting #75; see #75 history for detailed location, soil types and agricultural history.

Topography: gentle decline in elevation from western edge to gentle drainage swale that roughly splits site diagonally from mid-northwest to southeast corner; elevation varies approximately 15 feet. Southern edge abuts north side of Fame Flower Knob.

2. Site Preparation and Planting Time Line

October 18/19: corn harvested

October 24: corn stubble mowed

November 3: corn stubble burned: good burn, about 90% coverage

November 19: harrowed: 2 passes

November 19: planted with pendulum spreader, 3 passes: first two at level #24 and 3rd at level# 32 all at relatively high tractor speed

November 20: one full pass and ½ pass at level #32 at high tractor speed

Note: we were too conservative with initial planting rates; ideally we would make 2 to 2.5 total planting passes at more deliberate (ie, slower) tractor speed

November 20: harrowed to cover seed; one pass

November 20, 21, 22, ~ December 1, 5, 10: hand plant, approximately 22 hours

3. Seed List: attached:

GR Planting#83(2008)SeedList.xls

See Column M for 2008 seed collected; Columns J (2006) and K (2007) are included for comparison

157 species planted

318.39 pounds collected, less approx. 15 pounds used to (1) overseed the two track in GR Planting #68 (2006) & (2) overseed drainage swale in GR Planting #75 (2007): therefore, net of 303 pounds planted in GR Planting #83 or 43 pounds per acre: 38.2 pounds forbs and non-dominate grasses and 4.8 pounds of little blue per acre

4. New Species collected in 2008 (ie, new to Gobbler Ridge):

Asclepias hirtella – tall green milkweed

Asclepias Sullivanti – prairie milkweed*

Carex Richardsonii – prairie hummock sedge
Ceanothus Americanus – New Jersey tea
Diarrhena americana – beak grass/beak grain
Draba reptans – whitlow cress/ whitlow grass
Hypoxis hirsuta – yellow star grass
Rhexia Virginica – meadow beauty*
Rhus aromatica – aromatic sumac
Rhus glabra – smooth sumac
Salix humilis – prairie willow
Solidago gymnopermoides – viscid grass leaved gr
Triosteum auraniticum – early horse gentian**
Viola pedatifida – prairie violet

* = FU- & ** = Sav: these species not for GR sand hill plantings

5. Seed Collection/Treatment:

Nine bark (Phy opu) seed mature/available into early winter; avoid picking too early

Lance leaved loosestrife (Lys lan) seed darkened (browned) considerably 4-6 weeks after the green seeds we first picked; delay harvesting

picked western sunflower (Hel occ) earlier w/ some seed heads not brown per C Houser

observed that both lithospermums are available well later than initial picking, esp at Damien's

seeded 1/3 of NJ tea (Cea Ame) as-is before burning corn stuble and seeded 2/3 scarified at 170°F planted in mix

6. Lessons Learned/Misc

Start pendulum spreader at level #28

Wear supportive clothing for bouncy tractor ride

False toadflax (Com umb) seed to Creekmur for germination/plugs

7. 2009 Goal

Increase planting of schrubs

Identify optimum seed list for mesic planting in 2011

SCIENTIFIC NAME	COMMON NAME	08 LBS	09 LBS	2008/2009 NOTES
Agastache scrophulariaefolia	Purple Giant Hyssop			
Agrimonia gryposepala	Tall (?) Agrimony	0.10		
Agrimonia pubescens	Soft Agrimony			
Allium canadense	Wild Garlic	0.15		
Allium cernuum	Nodding Wild Onion	1.65		
Amelanchier leavis	Allegheny Shadblow	0.05		50 seeds
Amorpha canescens	Leadplant	16.20	0.35	
Amorpha fruticosa	Indigo Bush			
Andropogon gerardii	Big Bluestem; Turkeyfoot			intentionally not collected
Andropogon (Schizachyrium) scoparium	Little Bluestem	35.00		
Anemone canadensis	Meadow Anemone		0.01	
Anemone cylindrica	Thimbleweed	2.70		
Anemone virginiana	Tall Thimbleweed	0.05		
Antennaria neglecta	Field Cat's Foot	0.50		
Antennaria plantaginifolia	Pussy Toes (Everlasting)	0.80		
Apocynum androsaemifolium	Spreading Dogbane	0.05		
Apocynum cannabinum (X medium)	Dogbane (Indian Hemp)	0.10	0.40	
Aristida purpurascens	Arrow Feather	4.85		
Aronia (Pyrus) prunifolia (melanocarpa)	Black Chokeberry	0.45		
Artemisia caudata (campestris)	Beach Wormwood	0.75		
Asclepias amplexicaulis	Sand Milkweed	0.01		/~70 seeds
Asclepias hirtella	Hairy Green Milkweed	0.01		2 pods
Asclepias tuberosa interior	Butterfly Weed	0.01		50 seeds from Sally Baumgartner
Asclepias verticillata	Whorled Milkweed	1.85		some stems
Asclepias viridiflora	Short Green Milkweed			
Aster azureus (oolentangiensis)	Sky-blue Aster	5.05		
Aster ericoides (prostratus)	Heath Aster	6.15		
Aster laevis	Smooth (Blue)(Silky) Aster	0.85		
Aster linariifolius	Stiff Aster (Flax-Leaved)	1.85		Includes parts of stems
Aster novae-angliae	New England Aster			
Aster oblongifolius	Aromatic Aster	0.40		
Aster ptarmicoides	White Aster (Stiff Aster)	0.05		
Aster sericeus	Silky Aster	2.15		
Astragalus canadensis	Canadian Milk Vetch	1.55		
Baptisia leucantha	White Wild Indigo	5.25		
Baptisia leucophaea	Cream Wild Indigo	8.50		
Bouteloua curtipendula	Side-Oats Grama	3.80		
Bouteloua hirsuta	Hairy Grama	0.20		
Cacalia atriplicifolia	Pale Indian Plantain	0.40		
Cacalia plantaginea (tuberosa)	Indian Plantain		0.10	
Cacalia suaveolens	Sweet-scented Indian Plantain			In 2008, plant in "Obligate" habitat; from sedge meadow
Callirhoe triangulata	Clustered Poppy Mallow	0.01		25 seed heads/150 seeds

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Carex bicknellii	Copper-shouldered oval Sedge	0.70		
Carex muhlenbergii (enervis)	Sand Bracted Sedge (Muhlenberg's)	1.85		
Carex pennsylvanica	Common Oak (Penn) Sedge	0.60		1 pint w/much grass
Carex richardsonii	Prairie Hummock sedge	0.01		
Carya ovata	Shagbark Hickory			pick & plant
Castilleja sessiliflora **	Downy Yellow Painted Cup	0.10		
Ceanothus americanus	New Jersey Tea	2.40		scarification w/ 170 water
Chrysopsis camporum (Heterotheca)	Golden Prairie Aster	0.35		
Cirsium hillii *** (pumilum)	Hill's Thistle	0.10		
Comandra umbellata (richardsoniana)	False Toadflax	0.01		
Coreopsis lanceolata	Sand Coreopsis	0.10		
Coreopsis palmata	Prairie Coreopsis	2.15	0.60	
Coreopsis tripteris	Tall Coreopsis	0.30	0.20	
Corylus americana	American Hazelnut			
Cyperus filiculmis	Slender Sand Sedge	0.30		
Danthonia spicata	Poverty Oat Grass	0.95		
Desmodium canadense	Showy Tick Trefoil			intentionally not collected
Desmodium illinoense	Ill. Tick Trefoil	1.00		
Dodecatheon meadia	Shooting Star	0.60		
Echinacea pallida	Pale Purple Coneflower	60.75		
Elymus canadensis	Prairie Wild Rye	3.60		
Elymus villosus	Silky Wild Rye			plant in savanna
Elymus virginicus	Va. Wild Rye		0.90	
Eragrostis spectabilis	Purple Love Grass	1.50		primarily Era. spe. with witch grass
Erigeron strigosus	Daisy Fleabane	0.40		
Eryngium yuccifolium	Rattlesnake Master		0.40	
Eupatorium altissimum	Tall Boneset			
Eupatorium perfoliatum	Boneset	0.30		
Euphorbia corollata	Flowering Spurge	4.55	2.20	
Festuca obtusa (subverticillata)	Nodding Fescue	0.01		plant in savanna
Gaura biennis pitcheri (longiflora)	Common Gaura	0.15		/w stem
Gentiana (alba) flavida	Cream Gentian	0.20		
Gentiana (Gentianopsis) crinita	Fringed Gentian			plant in flood plain
Gentiana purberulenta	Prairie Gentian	0.05		
Gnaphalium obtusifolium	Sweet Everlasting (Old-Field Balsam)	1.50		
Helianthemum bicknellii	Rockrose (Frostweed)	0.20		
Helianthemum canadense	Common Rockrose (Frostweed)	2.20	0.20	
Helianthus hirsutus	Hispid sunflower	0.05		
Helianthus occidentalis	Western Sunflower; Naked S.	2.35		
Helianthus rigidus (laetiflorus)	Prairie Sunflower	0.05		
Helianthus tuberosus	Jerusalem Artichoke			uncertain ID; planted in sav

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<i>Heliopsis helianthoides</i>	False Sunflower; " Ox-eye "	2.40		
<i>Heuchera richardsonii</i> <i>grayana</i>	Rough Heuchera; Alum root	0.05		
<i>Hieracium gronovii</i>	Hairy Hawkweed	0.15		
<i>Hieracium longipilum</i>	Long-Bearded Hawkweed	0.01		uncertain ID vs. <i>H. gro.</i>
<i>Houstonia (Hedyotis)</i> <i>longifolia (canadense)</i>	Long-Leaved Bluets	0.10		
<i>Hypoxis hirsuta</i>	Yellow Star Grass	0.01		50 seeds
<i>Hystrix patula (Elymus)</i> <i>hystrix</i>	Bottlebrush Grass			plant in savanna
<i>Isanthus (Trichostema)</i> <i>brachiatus (m)</i>	False Pennyroyal	0.10		
<i>Juncus greenei</i>	Greene's Rush	1.25		Incorrect id as jun int in '06/seed only
<i>Juncus interior</i>	Inland Rush			
<i>Juncus tenuis</i>	Path Rush	0.01		
<i>Koeleria cristata (macrantha)</i>	Prairie June Grass	2.95		Mistakenly overplanted; intended 2.5 lbs.
<i>Krigia virginica</i>	Dwarf Dandelion	0.01		~0.5 cup fluffed/1.5 cup
<i>Kuhnia (Brickellia)</i> <i>eupatoroides corymbulosa</i>	False Boneset	1.00	0.45	
<i>Lechea stricta</i>	Bushy Pinweed	0.10		
<i>Lechea tenuifolia</i>	Slender-Leaved Pinweed	0.30		
<i>Lechea villosa (mucronata)</i>	Hairy Pinweed	0.10		
<i>Lespedeza capitata --</i>	Round-headed Bush Clover	7.85		
<i>Liatis aspera</i>	Rough Blazing-star (Rough Gayfeather)	35.80		
<i>Liatis cylindracea</i>	Dwarf Blazingstar	0.35		
<i>Liatis pycnostachya</i>	Tall Gayfeather; Prairie Blazing Star		1.05	
<i>Linaria canadensis</i>	Blue Toadflax	0.01		
<i>Linum sulcatum</i>	Groved Yellow Flax	0.15		
<i>Lithospermum canescens</i>	Hoary Puccoon	0.01		
<i>Lithospermum incisum</i>	Fringed (Narrow-leaved) Puccoon	0.01		
<i>Lobelia inflata</i>	Indian Tobacco	0.05		
<i>Lobelia spicata</i>	Pale-spike Lobelia	0.01	0.10	
<i>Lupinus perennis</i>	Wild Lupine	0.15		
<i>Lysimachia lanceolata</i>	Lance-Leaved Loosestrife	0.45		
<i>Lysimachia quadriflora</i>	Narrow-Leaved (Whorled) Loosestrife			
<i>Monarda fistulosa</i>	Wild Bergamot		0.20	intentionally not collected
<i>Monarda punctata villicualis</i>	Horse Mint	2.00	0.0 0.25	
<i>Napaea dioica</i>	Glade Mallow		0.20	
<i>Oenothera biennis</i> <i>canescens</i>	Common Evening Primrose	0.15		
<i>Oenothera clelandii</i> <i>(rhombipetala)</i>	Sand Evening Primrose	0.15		
<i>Onosmodium hispidissimum</i>	Marbleseed	0.35	0.01	
<i>Opuntia humifusa</i> <i>(compressa)</i>	Prickly Pear Cactus			
<i>Oxalis violacea</i>	Violet Wood-sorrel	0.60		

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Panicum capillare	Old Witch Grass	0.05		
Panicum leibergii	Prairie Panic Grass	1.20		
Panicum oligosanthos scribneria	Scribner's Panic Grass	1.05		lots of leaf weight/Meiner's '09
Panicum perlongum	Long-stalked Panic Grass	0.01		
Panicum villosissimum	White-Haired Panic Grass	0.70		
Panicum virgatum	Prairie Switch Grass	0.05		
Parthenium integrifolium	Wild Quinine (Feverfew)	12.00	0.90	
Paspalum ciliatifolium muhlenbergii	Hairy Lens Grass	0.60		
Pedicularis canadensis	Wood Betony	0.10		
pedicularis canadensis	wood betony	0.05		
Penstemon digitalis	Foxglove Beardtongue	0.60		
Penstemon hirsutus	Hairy Beard tongue	0.80		uncertain ID P. hir vs P. pal
Penstemon pallidus	Pale Beard Tongue	0.01		uncertain ID P. hir vs P. pal
Petalostemum (Dalea) candidum	White Prairie Clover	0.55	0.10	
Petalostemum (Dalea) purpureum	Purple Prairie Clover	6.10	1.45	
Phlox maculata	Sweet William Phlox	0.01		
Physocarpus opulifolius	Ninebark	0.25		
Polemonium reptans	Jacob's Ladder			
Polygala incarnata **	Pink Milkwort	0.01		5-8 seeds from main unit 7/25/07
Polygala polygama obtusata	Purple Milkwort	0.01		
Polygala sanguinea	Field Milkwort	0.15		2 cups/8 cups (2 bags)
Polytaenia nuttallii	Prairie Parsley	0.01		
Potentilla arguta	Prairie Cinquefoil	0.25	0.15	
Prenanthes aspera	Rough White Lettuce			
Prunus americana	Wild Plum			
Pycnanthemum tenuifolium	Narrow-leaved Mountain Mint	0.30	1.55	
Quercus alba	White Oak			
Quercus macrocarpa	Bur Oak			
Quercus velutina	Black Oak			
Rhus aromatica	Fragrant sumac	0.10		2 cups
Rhus glabra	Smooth Sumac	0.55		
Rosa carolina	Pasture Rose	8.60		
Rudbeckia hirta	Black-eyed Susan	0.40		
Rudbeckia subtomentosa	Sweet Blackeyed Susan	0.40	0.20	
Ruellia humilis	Wild Petunia			
Salix humilis	Prairie Willow	0.05	0.20	
Scrophularia lanceolata	Early figwort	1.35		
Scrophularia marilandica	Late Figwort	0.25		Dahlberg ROW; uncertain ID vs Scr. Lan.
Scutellaria parvula leonardi	Small Skullcap	0.01		
Senecio pauperculus	Balsam Ragwort	0.15		
Silene antirrhina	Sleepy Catchfly	0.05		
Silphium integrifolium	Rosinweed	1.70		
Silphium laciniatum	Compass plant	3.00		
Silphium terebinthaceum	Prairie Dock			
Sisyrinchium albidum	Common Blue-eyed Grass	0.25		

SCIENTIFIC NAME	COMMON NAME	08 LBS	09 LBS	2008/2009 NOTES
Solidago (Euthamia) graminifolia nuttallii	Grass-leaved Goldenrod	2.55	1.00	
Solidago gymnospermoides	Viscid Grass-leaved Goldenrod	2.35	4.00	
Solidago missouriensis fasciculata	Missouri Goldenrod	1.45		
Solidago nemoralis	Gray Goldenrod; Oldfield	3.20		
Solidago rigida	Stiff Goldenrod			
Solidago speciosa	Showy Goldenrod	1.00		
Sorghastrum nutans	Indian Grass			intentionally not collected; incidental from seed stripper
Specularia (Triodanis) perfoliata	Venus' Looking Glass	0.01		
Spiraea alba	Meadowsweet			
Sporobolus heterolepis	Prairie Dropseed	0.50		
Stipa spartea	Porcupine Grass	0.30		
Talinum rugospermum ***	Sand Fameflower			
Tephrosia virginiana	Goat's Rue	3.65		
Teucrium canadense	American Germander (Wood Sage)			plant in savanna
Tradescantia ohiensis	Ohio Spiderwort	7.90		
Triosteum aurantiacum	Early Horse Gentian (Orange- fruited)(Feverwort)(Tinker's Weed)	0.01		
Triosteum perfoliatum	Horse Gentian (Feverwort)(Tinker's Weed)	1.50		
Tsuga canadensis	Hemlock			
Verbena hastata	Blue Vervain		0.65	
Verbena stricta	Hoary Vervain	3.55		
Verbena urticifolia	Hairy White Vervain	0.35		
Veronicastrum virginicum	Culver's Root	0.10	1.35	
Viburnum prunifolium	Black Haw			
Viola fimbriatula	Sand Violet	0.01		
Viola pedata lineariloba	Birdsfoot Violet	0.01		
Viola pedatifida	Prairie Violet	0.01		
Viola sagittata	Arrow-leaved violet	0.01		
Vulpia octoflora tenella	Six-weeks fescue			
Wulfenia bullii *** (Bessey)	Kittentails	0.35		
Zizia aptera	Heart-leaved Meadow Parsnip	0.35		
Zizia aurea	Golden Alexanders	0.01		
Mesic Mix	Mesic mix		1.35	
		318.4	20.27	