
Planting 60, Clear Creek NE Triangle
Text and Map by Chris Hauser
Written April 13, 2008

Site Description:

Location:

Planting # 60 is located on the southern edge of Ogle County in Taylor Township (T22N, R10E). This is the NE portion of the NW quarter of the SE quarter of Section 15. This approx 3.5 acre triangular field is located at the NE corner of the 80-acre Clear Creek Unit. The north boundary is the fenceline along Stone Barn Road, which at the time of planting was infested with several weedy pines, mulberries, and honeysuckle, but were thinned in later years. The east boundary is the fenceline along the property owned by Homer and Juanita Williams. Weedy trees like pine and Black Cherry covered the part of the Williams property that was adjacent to the planting. The southwest boundary is formed by an unnamed northwest-flowing tributary of Clear Creek. This tributary is flanked by weedy riparian trees such as Box Elder, Silver Maple, Cottonwood, Gray Dogwood, and a few scattered rhizomatous sedges and Smooth Broom growing along the top of the creek bank.

These approximate coordinates were obtained from Google Earth:

NE corner: N 41°53'42", W 89°19'37"

NW corner: N 41°53'42", W 89°19'42"

SE corner: N 41°53'37", W 89°19'37"

Soils and Topography:

There are two distinct portions of this field that differ in topography and soil characteristics.

1. "dry hill": about 2 acres of light-colored subsoil on a southwest-facing slope in the NE corner of the field. I assumed this portion should be considered dry or dry-mesic.
2. "mesic flat": about 1.5 acres of darker and finer textured soil on flat ground parallel to the riparian corridor along the SW boundary of the field. Due to the flatness, dark soil, and proximity to the creek, I believed this portion should be seeded with mesic species.

Site History:

The presettlement history of this field was investigated using the General Land Office 1839 survey records, which show this field to be prairie. I would imagine the dry hill portion of the field was dry-mesic prairie, of course with more topsoil than is currently present. The mesic flats portion was probably more hydric in presettlement times. Since many small creeks eroded deeply into their streambeds following first cultivation, it is likely that the tributary on the SW boundary has eroded downward since settlement, it is likely that originally the creek was only about 2 feet below the adjacent prairie, so the flat portion of this field was probably wet prairie or even sedge meadow similar to the remnant wetland areas along Wade Creek. Currently, the stream is 4-6 feet below the adjacent fields.

The recent history of this field is not well-known to me. A 1999 aerial photo shows the field to be unfarmed... it was likely left fallow. In the early 2000's I believe the field was farmed for at least a couple of years during the early 2000's. I cannot remember for sure, but think the field was planted in corn during the 2003 growing season, and Jennifer and I harrowed the corn stubble in late fall 2003, before seeding.

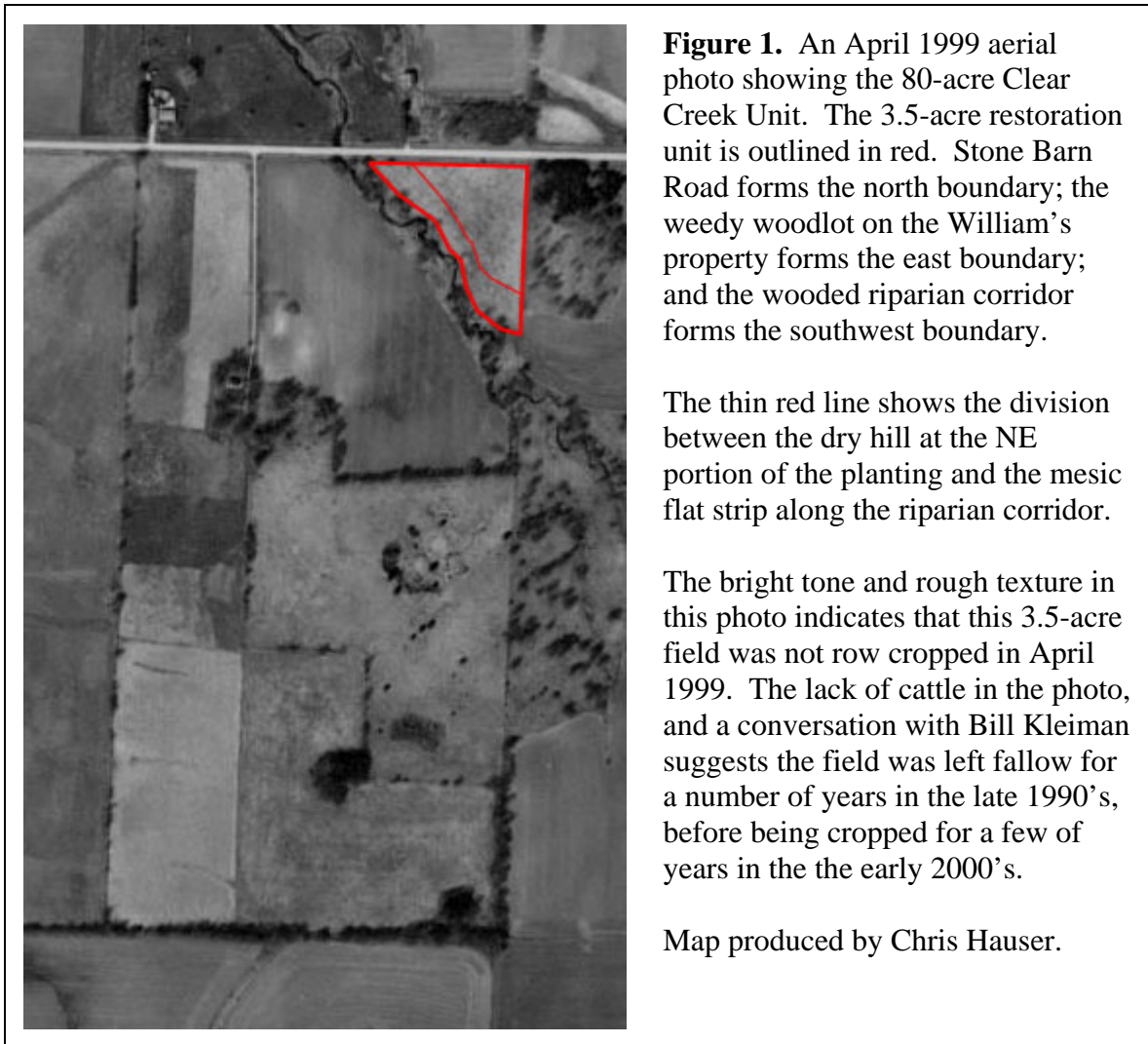


Figure 1. An April 1999 aerial photo showing the 80-acre Clear Creek Unit. The 3.5-acre restoration unit is outlined in red. Stone Barn Road forms the north boundary; the weedy woodlot on the William’s property forms the east boundary; and the wooded riparian corridor forms the southwest boundary.

The thin red line shows the division between the dry hill at the NE portion of the planting and the mesic flat strip along the riparian corridor.

The bright tone and rough texture in this photo indicates that this 3.5-acre field was not row cropped in April 1999. The lack of cattle in the photo, and a conversation with Bill Kleiman suggests the field was left fallow for a number of years in the late 1990’s, before being cropped for a few of years in the the early 2000’s.

Map produced by Chris Hauser.

2003 Restoration Activities:

2003 Seed Harvest:

In spring 2003, Jennifer was contracted by PPSOC to harvest the seed, prep the field, and sow the seed. As the contract stipulated, seed of particular species was to be harvested only from Nachusa remnants, and nothing was harvested from any Nachusa plantings, nor from nearby remnant prairies off the preserve. I suggested that Jennifer harvest a few additional species that were not on the PPSOC recommended species list, but overall she followed the contract word for word.

At the end of the season, Jennifer had harvested 57 species, with weight totaling about 82 pounds – 66 pounds of “dry” species, and 15.5 pounds of “mesic species”. All the seed was processed using the hammermill, and most was put into 3 mixes:

1. The “dry” mix, to cover the 2-acre dry hill and slopes.
2. The “mesic” mix, to cover the 1.5-acre mesic flat along the creek.
3. The “both” mix, to cover the entire 3.5-acre field.

See Table 1 for this 2003 mix.

2003 Field Prep and Seed Broadcasting:

Following the harvest of soybeans in the fall of 2005, Jennifer and I harrowed the field deeply using the tractor-mounted chain harrow. Over the course of a couple of weekends in November or December, Jennifer and I sowed the seed using the tractor-mounted pendulum broadcaster. Following the seed broadcast, I believe we harrowed the field again. Seeding coverage was very good, and very even across the field.

Our records indicate that we did not sow any Big Bluestem or Indian Grass. 40 pounds of Little Bluestem, and small amounts of Switch Grass and Canada Rye were the only big grasses added.

2004 Restoration Activities:

2004 Monitoring and Weed Control:

In the spring of 2004, Jennifer thought the planting looked bad. So around June, Jay Stacey, Jennifer and I walked the field. On the dry hill we were happy to identify a nice scattering of seedlings of over a dozen or so native species. A lot of Red Clover was sprouting in the field, which Jay recommended we manage with herbicide or pulling.

In the mesic flat along the creek we found fewer native seedlings (mostly just Wild Bergamot and Yellow Coneflower) and more weeds (Reed Canary Grass, Wild Parsnip, Red Clover, and thistles), so we agreed the flat area of the field would need some TLC. To help the mesic flat, it was mowed a couple of times over the summer, and we harvested seed to overseed the entire field.

While mowing the weeds in the prairie planting, I backed the mower into some of the brushy areas along the creek, to prevent their spread into the planting.

2004 Seed Harvest:

In spring 2004, Jennifer was again contracted by PPSOC to harvest seed to overseed this field, and I agreed to help her harvest. The contract was identical to the 2003 contract, but Jennifer and I harvested some species from plantings if we knew that their original seed source was from Nachusa remnants.

By the end of the harvest season, we had harvested 37 species, including 15 species not in the 2003 mixes, bringing the two-year total to 72 species. Our total seed weight was about 31 bulk pounds – about 23 pounds of “dry” species, and about 8 pounds of “mesic species”. As in 2003, the seed was processed using the hammermill, and was put into the same 3 mixes:

1. The “dry” mix, to cover the 2-acre dry hill and slopes.
2. The “mesic” mix, to cover the 1.5-acre mesic flat along the creek.
3. The “both” mix, to cover the entire 3.5-acre field.

See Table 2 for this 2004 mix.

2004 Field Prep and Seed Broadcasting:

In October or November I think, Jennifer and I sowed the seed using the tractor-mounted pendulum broadcaster. The mesic seed went out fast, and I’m not sure how good the coverage was in the southern mesic portion of the field. Jennifer and I spent about 45 minutes needling Porcupine Grass into the soil in the dry portion of the field.

2005 Restoration Activities:

2005 Monitoring and Weed Control:

As in 2004, Jennifer and I walked the field several times during the spring and early summer. The Red Clover and Wild Parsnip were bad throughout the field. If I remember correctly, in mid summer I mowed most of the field once to control Wild Parsnip, and later in the summer I mowed the flat areas a couple more times to control thistles and other weeds.

By the end of 2004, the dry hill was looking fairly good, with solid patches of native plants (especially little bluestem) covering half the ground. The other half of the ground was covered with patches of small Horseweed and Foxtail Grass, with scattered native plants underneath. In 2005, I harvested a lot of False Boneset, Canada Rye, and Tall Boneset from the dry hill. The flat portion had a scattering of Canada Wild Rye, Wild Bergamot, Yellow Coneflower, and a few Fox Sedge plants. Due to the lack of natives in the flat area, we decided to harvest seed for a mesic “rescue” mix, focusing on aggressive natives to help push out the weeds.

2005 Seed Harvest and Seed Broadcasting:

In spring 2005, I was contracted by PPSOC to harvest seed for part of the field across the creek to the west. However, I was sure to make time to harvest for the “rescue” mix for the mesic portion of the field.

My records and memory are limited in this regard, but if I remember correctly this mesic “rescue” mix consisted of about 10 pounds of Wingstem that I had harvested in Shabbona Savanna with the ATV-mounted seed stripper, and about 20 pounds of the combine mix... mostly Big Bluestem and Indian Grass. There may have been a few pounds of conservative aggressive mesic forbs included, such as Golden Alexanders, Culver’s Root, and a few others.

This “rescue” mix was broadcasted into the mesic portion of the field in November or December from the tractor-mounted pendulum broadcaster. Soil contact may have been less than perfect, due to the plant residue on the ground.

2006 Restoration Activities:

2006 Monitoring and Weed Control:

By mid summer 2006, on the dry hill the native plants had filled in very nicely, pushing out almost all of the red clover. For the second year in 2006, this dry area was a great place to harvest False Boneset, Upland Eupatorium, and Canada Rye. Conservative species like Wild Quinine, Western Sunflower, Prairie Coreopsis, conservative goldenrods, and other conservative species were becoming fairly common.

The mesic flat was looking a little bit better, with noxious weeds on the decline, and pioneer natives like Canada Wild Rye, Yellow Coneflower, Wild Bergamot, Blue Vervain, and Fox Sedge covering more ground. However I never saw conservative mesic species like Culver’s Root, Prairie Liatris, or Golden Alexanders. I think the flat portion of the field was mowed once in summer 2006.

See Table 3 for an approximation of the 2005 mesic rescue mix.

Table 1. Seed harvested and sown in 2003. “Mix” designates where the seed was sown: “dry” for the dry-mesic hill, “mesic” for the mesic flat along the creek, and “both” for the entire field. These mixes were sown using the pendulum seeder, onto harrowed stubble without snow.

Latin Name	Common Name	Mix	Pounds
<i>Amorpha canescens</i>	Leadplant	dry	0.03
<i>Anemone cylindrica</i>	Thimbleweed	dry	1.08
<i>Antennaria plantaginifolia</i>	Pussytoes	dry	trace
<i>Arenaria stricta</i>	Stiff Sandwort	dry	trace
<i>Asclepias syriaca</i>	Common Milkweed	both	trace
<i>Baptisia alba</i>	White Wild Indigo	both	1.08
<i>Baptisia leucophaea</i>	Cream Wild Indigo	dry	0.04
<i>Bouteloua curtipendula</i>	Side-Oats Grama	dry	0.03
<i>Brickellia eupatorioides</i>	False Boneset	dry	0.08
<i>Cacalia atriplicifolia</i>	Pale Indian Plantain	dry	trace
<i>Carex bicknellii</i>	Bicknell's Sedge	dry	trace
<i>Carex brevior</i>	Plains Oval Sedge	dry	trace
<i>Carex muhlenbergii</i>	Muhlenberg's Sedge	dry	trace
<i>Castilleja sessiliflora</i>	Downy Yellow Painted Cup	dry	trace
<i>Chrysopsis camporum</i>	Golden Aster	dry	trace
<i>Cirsium hillii</i>	Hill's Thistle	dry	trace
<i>Coreopsis palmata</i>	Prairie Coreopsis	dry	0.12
<i>Dalea purpurea</i>	Purple Prairie Clover	dry	3.08
<i>Dodecatheon meadia</i>	Shooting Star	dry	0.08
<i>Echinacea pallida</i>	Pale Purple Coneflower	dry	4.00
<i>Elymus canadensis</i>	Canada Wild Rye	both	1.08
<i>Eupatorium altissimum</i>	Tall Boneset	dry	0.08
<i>Euthamia graminifolia</i>	Grass-leaved Goldenrod	both	6.00
<i>Geum triflorum</i>	Prairie Smoke	dry	trace
<i>Helianthus occidentalis</i>	Western Sunflower	dry	0.08
<i>Heliopsis helianthoides</i>	False Sunflower	both	1.08
<i>Hypericum canadense</i>	Canadian St. John's-wort	mesic	0.03
<i>Lespedeza capitata</i>	Round -headed Bush Clover	both	5.08
<i>Liatris aspera</i>	Rough Blazing Star	dry	2.08
<i>Lithospermum canescens</i>	Hoary Puccoon	dry	trace
<i>Lithospermum incisum</i>	Fringed Puccoon	dry	trace
<i>Monarda fistulosa</i>	Wild Bergamont	both	1.08
<i>Oxalis violacea</i>	Violet Wood Sorrel	dry	trace
<i>Panicum oligosanthos</i>	Panic Grass	dry	trace
<i>Panicum virgatum</i>	Prairie Switch Grass	both	0.02
<i>Parthenium integrifolium</i>	Wild Quinine	both	4.00
<i>Polygala polygama</i>	Purple Milkwort	dry	trace
<i>Potentilla arguta</i>	Prairie Cinquefoil	dry	0.03
<i>Pycnanthemum virginianum</i>	Mountain Mint	mesic	3.08
<i>Ratibida pinnata</i>	Yellow Coneflower	both	0.02
<i>Rudbeckia hirta</i>	Black-eyed Susan	both	0.02
<i>Rudbeckia subtomentosa</i>	Sweet Black-eyed Susan	mesic	0.05

<i>Schizachyrium scoparium</i>	Little Bluestem	dry	40.00
<i>Senecio aureus</i>	Golden Ragwort	dry	trace
<i>Silphium integrifolium</i>	Rosinweed	both	0.12
<i>Sisyrinchium campestre</i>	Blue-eyed Grass	dry	trace
<i>Solidago juncea</i>	Early Goldenrod	dry	2.00
<i>Solidago speciosa</i>	Showy Goldenrod	dry	3.00
<i>Stipa spartea</i>	Porcupine Grass	dry	0.06
<i>Tradescantia ohiensis</i>	Common Spiderwort	both	1.08
<i>Triosteum perfoliatum</i>	Horse Gentian	dry	0.05
<i>Verbena hastata</i>	Blue Vervain	mesic	1.80
<i>Verbena stricta</i>	Hoary Vervain	dry	0.08
<i>Vernonia fasciculata</i>	Common Ironweed	mesic	0.04
<i>Veronicastrum virginicum</i>	Culver's Root	mesic	0.06
<i>Viola pedata</i>	Bird's Foot Violet	dry	trace
<i>Zizia aurea</i>	Golden Alexanders	mesic	0.09

Table 2. Seed harvested and sown in 2004. “Mix” designates where the seed was sown: “dry” for dry-mesic hill, “mesic” for the mesic flat along the creek, and “both” for the entire field.

Latin Name	Common Name	Mix	Pounds
<i>Anemone cylindrica</i>	Thimbleweed	dry	1.00
<i>Baptisia alba macrophylla</i>	White Wild Indigo	both	1.50
<i>Baptisia bracteata leucophaea</i>	Cream Wild Indigo	dry	trace
<i>Bouteloua curtipendula</i>	Side-Oats Grama	dry	0.50
<i>Cacalia tuberosa</i>	Indian Plantain	mesic	0.50
<i>Carex species</i>	Wetland Sedges	mesic	trace
<i>Carex species</i>	Upland Sedges	dry	0.25
<i>Chrysopsis camporum</i>	Golden Aster	dry	trace
<i>Coreopsis palmata</i>	Prairie Coreopsis	dry	0.25
<i>Cyperus filiculmis</i>	Slender Sand Sedge	dry	trace
<i>Desmodium illinoiense</i>	Illinois Ticktrefoil	dry	0.50
<i>Dodecatheon meadia</i>	Shooting Star	dry	0.25
<i>Echinacea pallida</i>	Pale Purple Coneflower	dry	6.00
<i>Eupatorium altissimum</i>	Tall Boneset	dry	4.00
<i>Euphorbia corollata</i>	Flowering Spurge	dry	0.25
<i>Gentiana puberulenta</i>	Prairie Gentian	dry	trace
<i>Gnaphalium sp</i>	Sweet Everlasting	dry	trace
<i>Heiraceum sp</i>	Hairy Hawkweed	dry	0.25
<i>Helianthus occidentalis</i>	Western Sunflower	dry	0.50
<i>Heuchera richardsonii</i>	Alum Root	dry	trace
<i>Hypericum pyramidatum</i>	Great St. John's Wort	mesic	0.50
<i>Kohleria cristata</i>	June Grass	dry	1.00
<i>Liatis aspera</i>	Rough Blazing Star	dry	1.50
<i>Panicum virgatum</i>	Prairie Switch Grass	both	trace
<i>Parthenium integrifolium</i>	Wild Quinine	dry	1.25
<i>Polygala sanguinea</i>	Field Milkwort	dry	trace
<i>Potentilla arguta</i>	Prairie Cinquefoil	dry	0.50
<i>Ratibida pinnata</i>	Yellow Coneflower	both	1.00
<i>Rosa carolina</i>	Pasture Rose	dry	0.75
<i>Rudbeckia subtomentosa</i>	Sweet Black-eyed Susan	mesic	1.00
<i>Silphium integrifolium</i>	Rosinweed	both	1.00
<i>Silphium laciniatum</i>	Compass Plant	dry	trace
<i>Stipa spartea</i>	Porcupine Grass	dry	0.50
<i>Verbena stricta</i>	Hoary Vervain	dry	2.00
<i>Vernonia fasciculata</i>	Common Ironweed	mesic	0.50
<i>Veronicastrum virginicum</i>	Culver's Root	mesic	1.50
<i>Zizia aurea</i>	Golden Alexanders	mesic	2.00

Table 3. An approximate list of the seed harvested and sown in 2005. All seed was sown in the mesic flat area in an attempt to compete with the aggressive weeds in that portion of the field.

Latin Name	Common Name	Mix	Pounds
<i>Actinomeris alternifolia</i>	Wingstem	mesic	~10
<i>Andropogon gerardii</i>	Big Bluestem	mesic	~15
<i>Rudbeckia subtomentosa</i>	Sweet Black-eyed Susan	mesic	~1
<i>Sorghastrum nutans</i>	Indian Grass	mesic	~15
<i>Veronicastrum virginicum</i>	Culver's Root	mesic	~1
<i>Zizia aurea</i>	Golden Alexanders	mesic	~1