

Steve,

More BS like this is in prep &  
will come your way

Sandy

Plant Inventory  
of the  
Hoover Nature Trail - Lingle Creek South Prairie Remnant  
And adjacent Corps of Engineers' land  
(Section 9 only)

Prepared by  
Richard "Sandy" Rhodes II

All plants are reported by their scientific names and each list is alphabetical by these scientific names.

PLEASE NOTE that these observations were hastily made in a two hour period just before sunset on 12 October, 1991. All plants were identified from fruits and vegetative characters (only the asters still retained frost-burned flowers). It is therefore highly probable that many of the plants blooming or fruiting earlier in the year have been overlooked!

The localities are marked on the map attached at the end of this document. It is a 200% enlargement of part of the USGS Ely 7.5" Quadrangle.

Date of observation:

12 Oct., 1991      Rhodes

## Lingle Creek South (Sec. 9) Area, Hoover Nature Trail

Plant list for prairie tract (LCS P 1) in northeast right-of-way (ROW), Lingle Creek South, Johnson Co., Iowa.

From 120th Street<sup>(F12)</sup> on the north for about 0.60 miles southward along HNT ROW.

Relicts located in (NW 1/4, NE 1/4, & SE 1/4) of SE 1/4 of NW 1/4; SW 1/4 of SW 1/4 of NE 1/4; and NW 1/4 of SE 1/4 of Sec. 9 of T81N, R6W.

Degraded to excellent (? virgin) prairie remnants on small knolls (most xeric are almost "sand prairie"); swales with more mesic (? virgin) prairie remnants to small wetlands in deepest depressions. Many small plots of excellent character are present in the northeast ROW, but are interspersed with shrub/tree and brome invasions (brome more dominant toward SE end of tract).

*Ambrosia artemisiifolia*, short ragweed  
*Ambrosia trifida*, giant ragweed (native weed)  
*Andropogon gerardii*, big bluestem (grass)  
*Aster* spp., wild asters {white flowers, tiny leaves}  
*Aster* spp., wild asters {large-leaved, but not New England aster}  
*Baptisia leucantha*, prairie [or white] false indigo [also called *B. lactea*]  
*Bromus* spp., brome grasses (both native and aggressive alien pasture grasses)  
*Ceanothus americanus*, New Jersey tea  
*Elymus* spp., wild ryes [{nodding head with gently curved, flexible awns} probably  
*E. canadensis*, Canada [or nodding] wild rye]  
? *Eragrostis* spp., love [or tumble] grasses  
*Euphorbia corollata*, flowering spurge  
*Fragaria* spp., wild strawberries  
*Helianthus* spp., sunflowers [*Heliopsis* spp. not distinguished]  
? *Hypericum* spp., St. John's-worts  
*Juniperus communis*, common juniper [or cedar] (small trees and saplings)  
— *Lespedeza capitata*, round-head bush clover  
*Monarda fistulosa*, wild bergamot  
*Muhlenbergia* spp., muhly grasses  
*Oenothera* spp., evening primroses [probably *O. biennis*, common evening primrose]  
*Panicum* spp., "rosette panicums" {low, tufted culms in late summer/fall}  
*Pastinaca sativa*, wild parsnip (alien weed)  
— *Petalostemon* spp., prairie clovers [also called *Dalea* spp.]  
*Phalaris* spp., (native?) reed canary grass  
*Potentilla* ? *arguta*, tall cinquefoil {silvery-haired}  
*Ratibida pinnata*, yellow [or gray-head prairie] coneflower  
*Rosa* spp., wild roses  
*Rhus* spp., sumacs [probably *R. glabra*, smooth sumac] (shrub thickets)  
*Rubus* spp., berry brambles [blackberry, raspberry]  
*Solidago* spp., other goldenrods  
*Solidago graminifolia*, grass-leaved goldenrod [also called *Euthamia graminifolia*]  
*Solidago rigida*, stiff [or rigid] goldenrod  
*Sporobolus asper*, dropseed  
*Verbascum thapsus*, common mullein

List continued next page:

*Verbena* spp., vervains  
*Veronicastrum virginicum*, Culver's root  
*Vitis* spp., wild grapes

Other taxa present but NOT inventoried (including small trees).

Management recommendations:

- This area should be managed as a single unit prairie together with adjacent Corps lands. It has good potential for restoration to high quality prairie. See last page for more recommendations.

List for prairie plants on Corps land (LCS P 2) to northeast of HNT ROW, Lingle Creek South, Johnson Co., Iowa.

Centered about 0.25 miles south of 120th Street; <sup>(F12)</sup> in a narrow strip between the ROW fence and plowed fields to NE.

Approximately located in SE 1/4 of SE 1/4 of NW 1/4; SW 1/4 of SW 1/4 of NE 1/4; and NW 1/4 of NE 1/4 of SE 1/4 of Sec. 9 of T81N, R6W.

Degraded prairie remnant (probably a regeneration from severe disturbance) with damp ground taxa in depressions. Contains taxa NOT seen elsewhere in immediate vicinity.

*Andropogon gerardii*, big bluestem (grass) - near HNT ROW fence row

Cyperaceae gen. & sp. undetermined, sedge family {tall, loose head}

*Eupatorium perfoliatum*, boneset

*Liatris pycnostachya*, gayfeather [or prairie blazingstar] - Although not covering too large an area, this is one of the most dense and vigorous clumps that I have seen in Johnson County!

*Ludwigia alternifolia*, seed-box

*Pycnanthemum* spp., mountain mints

*Rosa multiflora*, multiflora rose (alien pest - TO BE ERADICATED) - one small clump

*Solidago graminifolia*, grass-leaved goldenrod [also called *Euthamia graminifolia*]

*Stachys* spp., hedge-nettles

Many other taxa present but NOT inventoried.

Management recommendations:

- This area should be managed as a single prairie unit together with adjacent HNT & Corps lands. The presence here of taxa not found elsewhere in the immediate vicinity indicates that this area should be included both as a seed source and as representative of micro-habitats possibly not found elsewhere nearby. It has good potential for restoration to prairie, especially as part of a larger and more viable management unit. See last page for more recommendations.

Observations about vegetation on Corps land (LCS SI 1) to southwest of HNT ROW, Lingle Creek South, Johnson Co., Iowa.

Centered about 0.55 miles south of 120th Street<sup>(F12)</sup> in a wide strip between the ROW fence and Ely Road (W6E) to southwest.

Approximately located in SE 1/4 & SW 1/4) of NW 1/4 of SE 1/4 of Sec. 9 of T81N, R6W.

Old field vegetation? This area largely has reverted to thickets of brambles. Trees and shrubs are invading it as well. Although not noted in my sketchy field notes, the common goldenrods and other early prairie succession taxa also are probably present.

*Fragaria* spp., wild strawberries - large patches in openings in brambles  
*Rubus* spp., berry brambles [blackberry, raspberry]

Other taxa present but NOT inventoried.

Management recommendations:

- This area should be managed as a single prairie unit together with adjacent HNT & Corps lands. Although surrounded on three sides by trees (both native deciduous "weed" trees and planted non-native, to Johnson County, conifers), the very sandy soils of this tract seem to be near ideal habitat for the ornate box turtle (*Terrapene ornata ornata*). It has good potential for restoration to prairie, especially as part of a larger and more viable management unit. See last page for more recommendations.

## Lingle Creek South (Sec. 9) Area, Hoover Nature Trail

Plant list for prairie tract (LCS P 3) in southwest HNT ROW and Corps land to southwest, Lingle Creek South, Johnson Co., Iowa.

(F12)

From 120th Street, on the north for about 0.45 miles southward along HNT ROW.

Relicts located in (NW 1/4, NE 1/4, & SE 1/4) of SE 1/4 of NW 1/4; SW 1/4 of SW 1/4 of NE 1/4; NE 1/4 of NE 1/4 of SW 1/4; and (NW 1/4, SW 1/4, & SE 1/4) of NW 1/4 of SE 1/4 of Sec. 9 of T81N, R6W.

Degraded to good prairie remnants on small knolls (most xeric are almost "sand prairie"); swales with more mesic prairie remnants to small wetlands in deepest depressions. Many small plots of good character are present in the southwest ROW and on adjacent Corps land, but are interspersed with shrub/tree and brome invasions. This area may have in part served as a borrow pit for the fill of the railroad grade, but disturbances since that time (the late 1800's) seem to have been of low enough intensity to allow prairie vegetation to partly reestablish itself. A shelter belt of pine trees (not native to Johnson County) has been planted along the southeast end of this tract on Corps land.

- Andropogon gerardii*, big bluestem (grass)  
*Antennaria* spp., pussey-toes - Corps land  
*Aristida* spp., three awn grasses - Corps land  
*Asclepias verticillata*, whorled milkweed  
*Baptisia leucantha*, prairie [or white] false indigo [also called *B. lactea*]  
*Bromus* spp., brome grasses (both native and aggressive alien pasture grasses)  
*Cornus* spp., dogwoods (shrub thickets)  
 Cyperaceae gen. & sp. undetermined, sedge family {tall, loose heads} - near wetland on Corps land by Ely Road (W6E)  
 Cyperaceae gen. & sp. undetermined, sedge family {short} - near wetland on Corps land by Ely Road (W6E)  
*Helenium autumnale*, sneezeweed - near wetland on Corps land by Ely Road (W6E)  
*Helianthus* spp., sunflowers [*Heliopsis* spp. not distinguished]  
 ? *Juncus* spp., rushes - in wetland on Corps land by Ely Road (W6E)  
*Juniperus communis*, common juniper [or cedar] (small trees and saplings)  
*Lespedeza capitata*, round-head bush clover  
*Ludwigia alternifolia*, seed-box  
*Medicago sativa*, domestic alfalfa (introduced crop plant) or *Coronilla varia*, crown vetch (introduced ground cover)  
*Nepeta cataria*, catnip (alien weed)  
*Oenothera* spp., evening primroses [probably *O. biennis*, common evening primrose]  
*Panicum* spp., panic grasses [probably *P. virgatum*, switch grass]  
*Panicum* spp., "rosette panicums" {low, tufted culms in late summer/fall}  
*Pastinaca sativa*, wild parsnip (alien weed)  
*Petalostemon* spp., prairie clovers [also called *Dalea* spp.] - below power high-line at north end of tract, in narrow strip between Ely Road (W6E) and railroad fill of HNT ROW; this is the largest and most vigorous patch that I have seen in Johnson County  
*Polygala* spp., milkworts [probably *P. sanguinea*, blood milkwort]  
*Potentilla* spp., other cinquefoils {small but erect}  
*Potentilla* ? *arguta*, tall cinquefoil {silvery-haired}  
*Pycnanthemum* spp., mountain mints  
*Ratibida pinnata*, yellow [or gray-head prairie] coneflower

List continued next page

*Rudbeckia* spp., coneflowers [either *R. subtomentosa*, branched [or sweet] coneflower OR *R. triloba*, tall coneflower [or brown-eyed susan]]  
? *Scirpus* spp., bulrushes - in wetland on Corps land by Ely Road (W6E)  
*Solidago* spp., other goldenrods  
*Solidago graminifolia*, grass-leaved goldenrod [also called *Euthamia graminifolia*]  
*Sporobolus asper*, dropseed  
*Stachys* spp., hedge-nettles  
*Typha* spp., cat-tails - in wetland on Corps land by Ely Road (W6E)  
*Verbena* ssp., vervains  
*Veronicastrum virginicum*, Culver's root

Other taxa present but NOT inventoried.

Management recommendations:

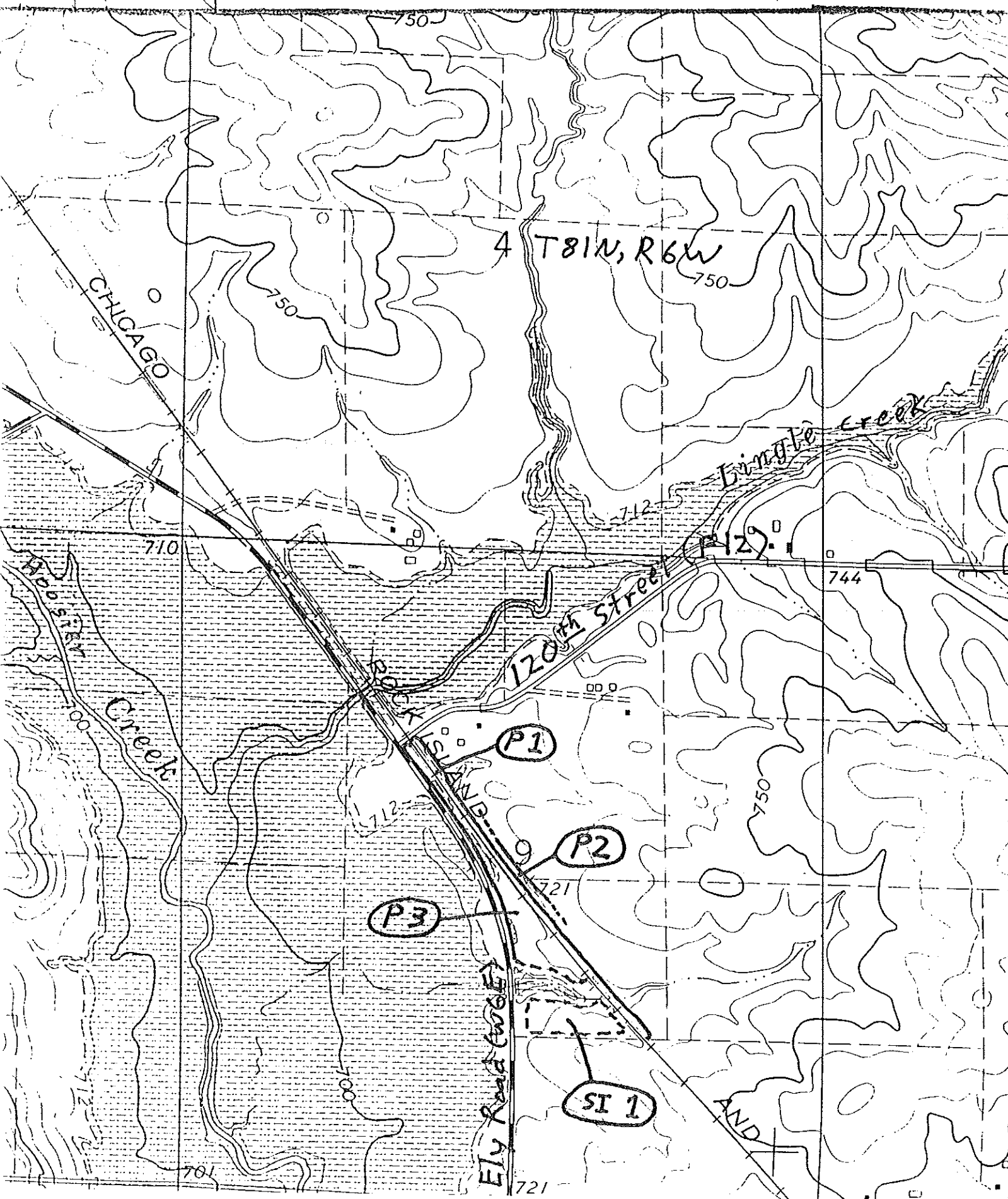
- This area should be managed as a single unit prairie together with adjacent Corps lands. It has good potential for restoration to high quality prairie. See last page for more recommendations.



## Management recommendations for the Lingle Creek South tracts.

- This area has good potential for restoration to high quality prairie habitat.
- Both Hoover Nature Trail and Corps of Engineers lands should be managed as a single tract of prairie. I would guess that it is possible to define a restoration tract for management purposes, bisected by the nature trail, that would total over 20 acres. Note that this would be as large as the best existing prairie preserve (Williams Prairie) in Johnson County.
- Although I have not seen it, I have been told (Lon D. Drake, Geology Department, University of Iowa) that there also is some remnant prairie vegetation along the old Rock Island right-of-way to the north of Lingle Creek. If correct, the northern area could serve to enhance the viability of this prairie tract.
- Small areas of the HNT ROW may be virgin prairie sod; part of the area appears to be naturally regenerated prairie; and part is low quality, old field vegetation. Considerable restoration work will be needed in the more highly disturbed parts of this tract. The extreme rarity of natural prairie remnants argues for caution in using extra-local seed for restoration purposes. Nonetheless, it may be necessary to collect Johnson or Linn County seed from other remnants along the Hoover Nature Trail or elsewhere in these counties in order to increase the diversity of this rather stressed prairie remnant. No seed from outside this two county area should be used.
- The entire area needs to be burned and selectively mowed to control weeds, trees, and shrub thickets. Most of the pine shelter belt on Corps land should be removed. Junk piles should be removed from the southwest side of the ROW (may be on Corps land). Fence lines should be relocated to delineate the boundaries of this prairie management unit (Corps land).

Lingle Creek South (Lcs) localities



Ely Quad CI=10' (@ ~200%)