



Presented by
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Woodland Management for Wildlife





Illinois the Prairie State







Wooded Habitat Types

- Savanna
 - A grassland (prairie) with scattered trees. Trees are characteristically oaks, well spaced or in clusters. Fire dependent. Approximately 10-60% canopy cover.
- Woodland
 - An open forest with a vigorous turf of grasses and flowers throughout the growing season. Fire dependent. Many trees have spreading lower limbs. Enough light for oak regeneration. Approximately 60-80% canopy cover.
- Forest
 - An oak forest is intermediate between oak woodland and maple forest. Maple forest is fire intolerant. Most trunks have few lower limbs. Shade tolerant species of understory trees and shrubs present. Herbs are mostly spring ephemerals. 80-100% canopy cover.

Prairie- Forest Continuum

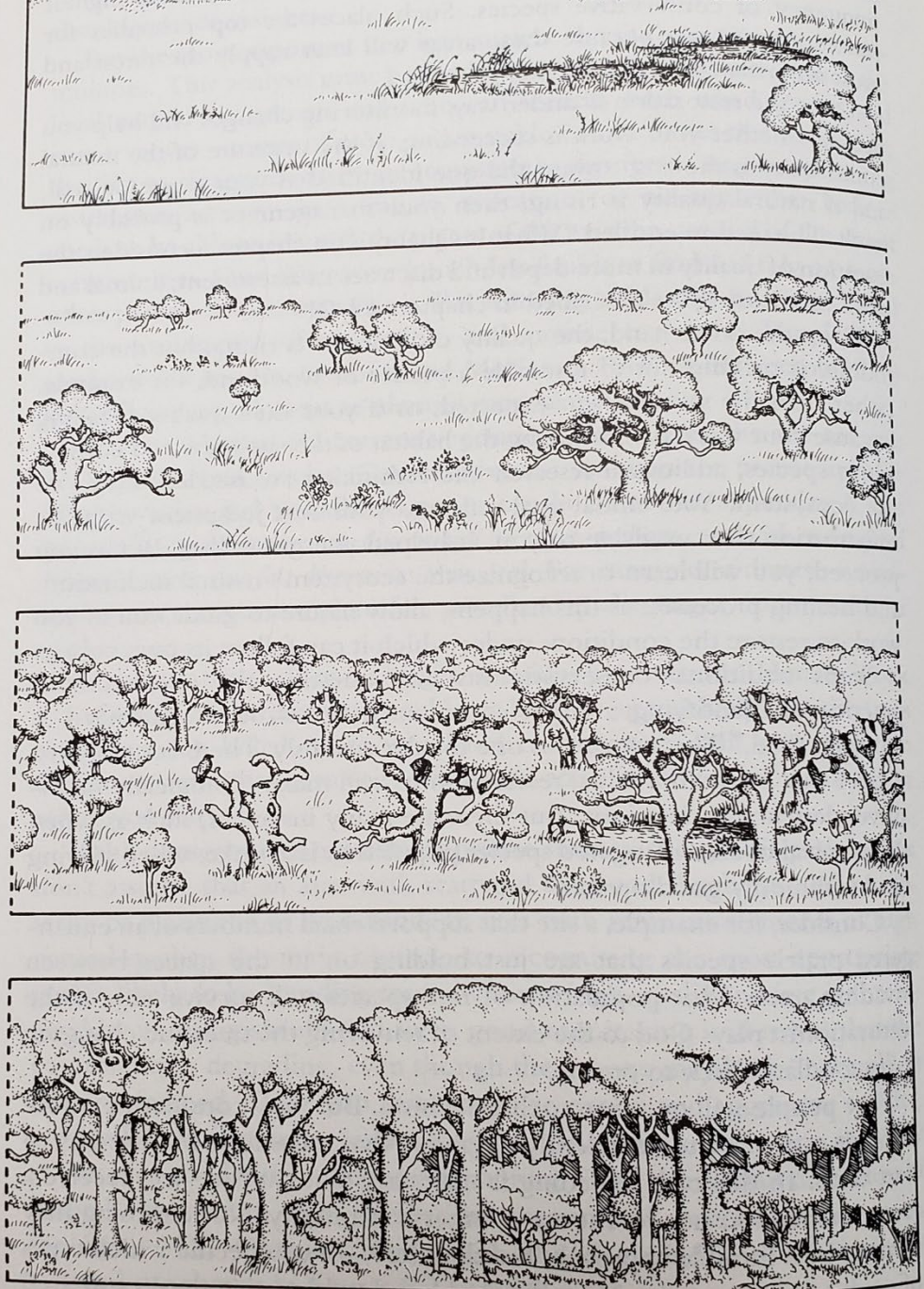
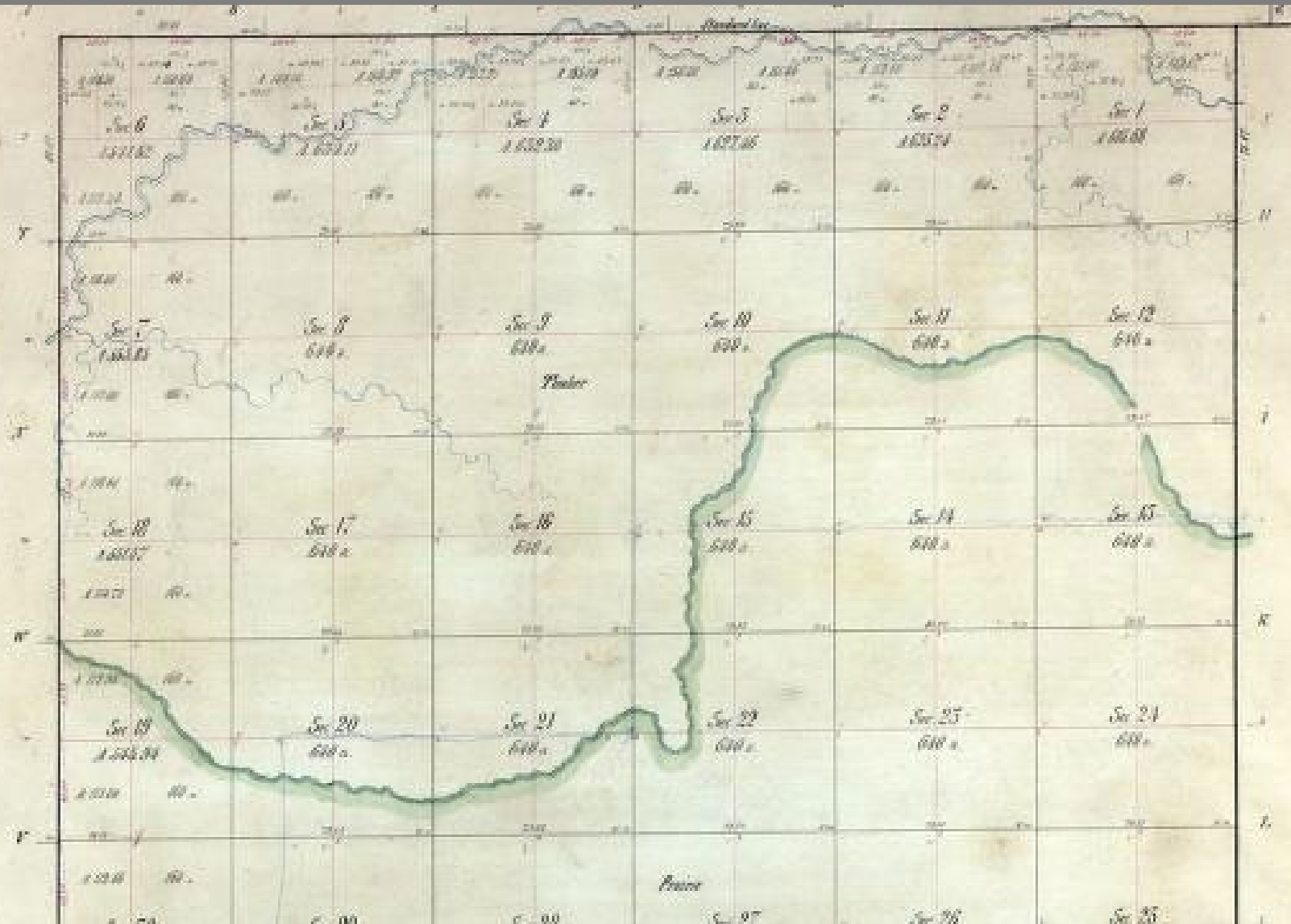


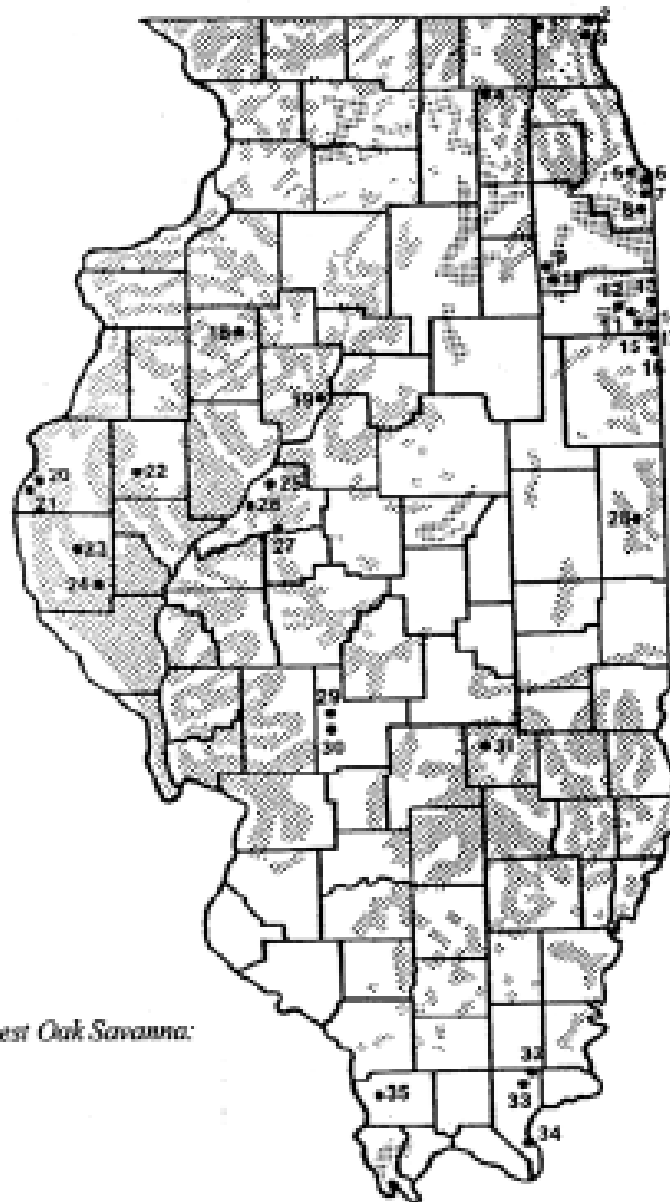
Figure 4.1. Prairie-forest continuum.

Illinois Historic Land Plat Surveys

http://landplats.ilsos.net/FTP_Illinois.html



Potential Presettlement Oak Savanna Region in Illinois



*Extent and Status of Midwest Oak Savanna:
Presettlement and 1985*
Nuzzo, Victoria A.
Natural Areas Journal
Vol. 6, No. 2 1986

Adapted From: Fehrenbacher, et al. (1984)
Hanson (1981)
Kilbourn (1959)
Horn (1978)

Remnant Trees







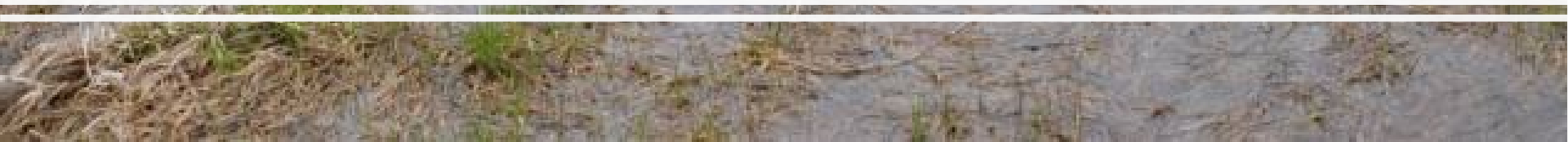








Wetland Savanna/Woodland Complex in Boone County





Remnant Bur Oaks, Little Bluestem and Eastern Red Cedar



Remnant Plants

Gaura biennis



Big bluestem



Little Bluestem and Wild Bergamot



Joe Pye Weed and White Oak



Figwort (Snapdragon family)

Illinois Soil Orders

- ❖ Two main soil orders
 - ❖ Mollisols – Prairies
 - ❖ Alfisols- Timber
 - ❖ Integrate soils
 - AKA: Savannas

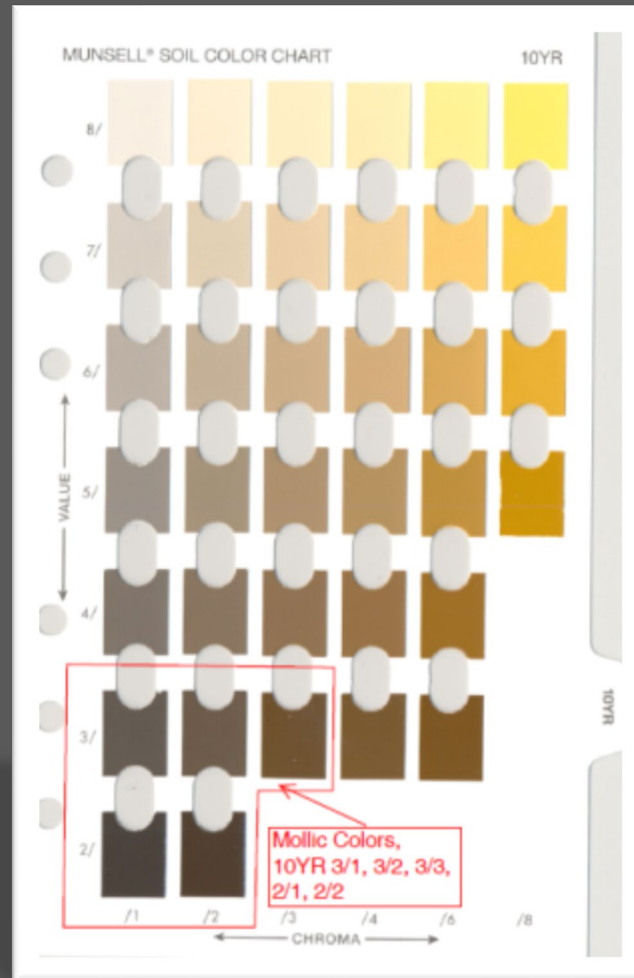
Mollisol



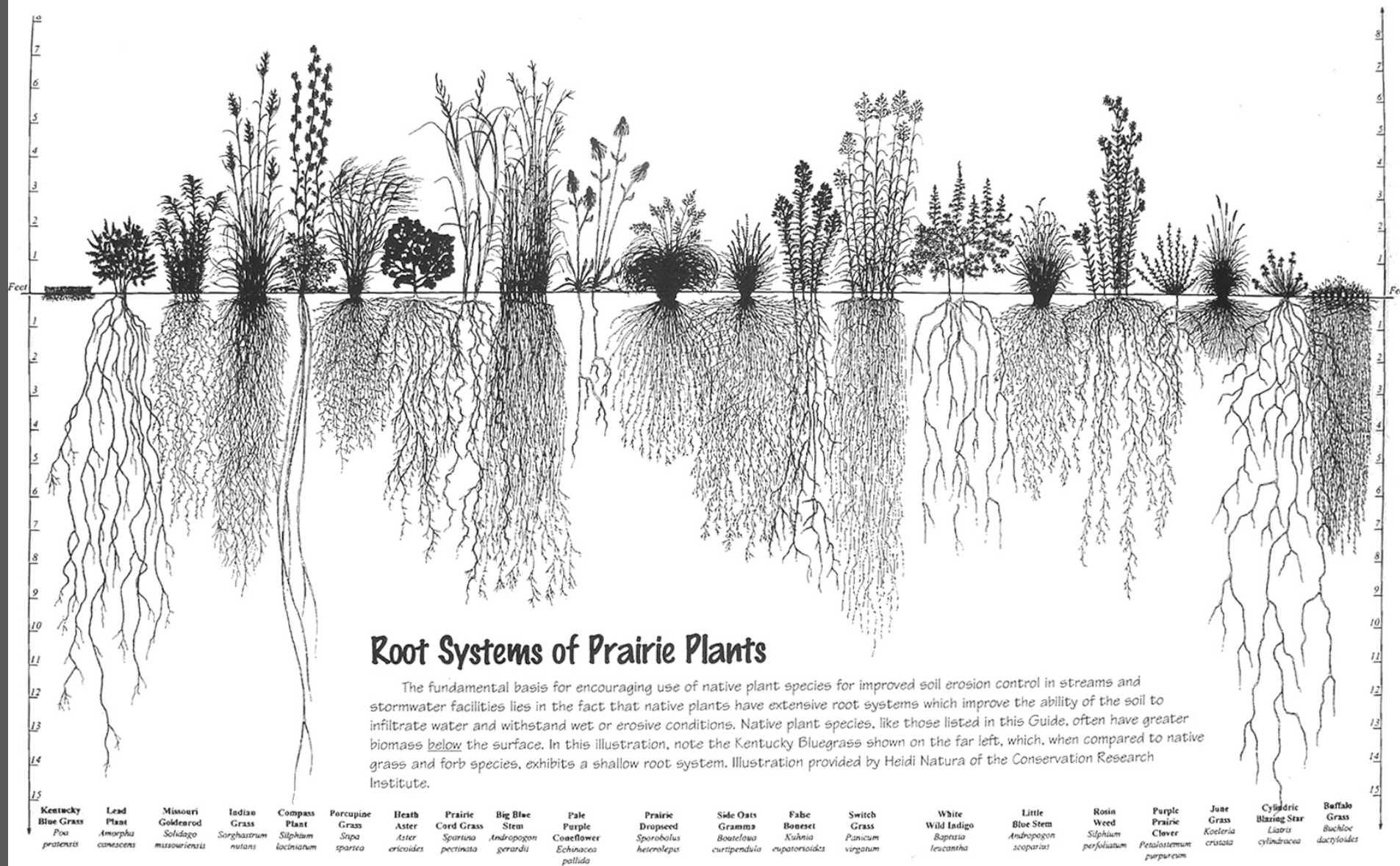
Alfisol



Munsell Soil Color Chart



10+ inches of the Mollic colors = Prairie
(Mollisols)



Organic matter accumulation in the soil is due to the prairie plant roots growing and dying off each year. Slowly building organic matter over the eons.

Driftless Area (Unglaciated)





Official Soil Series Description (OSD) Site:

<http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/soils/>

Soil map units and associated Orders:

403-Elizabeth, 10+” **mollic** surface, shallow to bedrock (7-20”)

417-Derinda, Alfisol, Thin **mollic** A horizon-uncultivated, BE or E horizon

547-Eleroy, Alfisol, <5” **mollic** surface, E horizon

755-Lamoille, Alfisol, 4” **mollic** surface, E & BE horizons

785-LaCrescent, 10” **mollic** surface

905F-Newglarus/Lamoille,

Newglarus-Alfisol, 9” or less **mollic** surface, BE or E horizon

928D2-Newglarus/Palsgrove, Alfisol, uncultivated **mollic** surface, can have a BE or E horizon or not

Web Soil Survey-internet or smart phone app for your soils information

<http://websoilsurvey.nrcs.usda.gov/>

Check out the soil series profile description from the OSD for color and depth of the surface layer.







Gooseberry Native Shrub

Indicator of grazed woodlands
Thorny stems cattle will not eat, goats will!



Osage Orange, *Maclura pomifera*

Native to Arkansas, not Illinois

Indicator of grazed woodland.

Girdle with 2 cuts to ensure the cambium has been severed

Very dense wood



Invasive Species Bush honeysuckle

Foliage stays green late in to fall with
red berries, easy to identify



Autumn Olive



Garlic Mustard

Methods to Improve Woodlands

- Invasive & undesirable species control
 - Woody removal
 - Mechanical, hand cutting, herbicide
 - Herbaceous
 - Herbicide, hand pulling
 - Goats!
- Timber stand improvement or crop tree release to allow sunlight so trees don't self prune
- Prescribed Burning

Summary

- Remnant vegetation
- Determine soil type
 - Mollisol (Prairie) >3 trees/ac
 - Alfisol
 - Savanna (10-60% canopy cover)
 - Woodland (60-80% canopy cover)
 - Forest (80-100% canopy cover)
- Decide how you want to manage your property
- Make a plan of the steps required to reach your land management goal



Photos courtesy of

Ellen Starr, NRCS Biologist
&

Paul Searl, NRCS District Conservationist



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