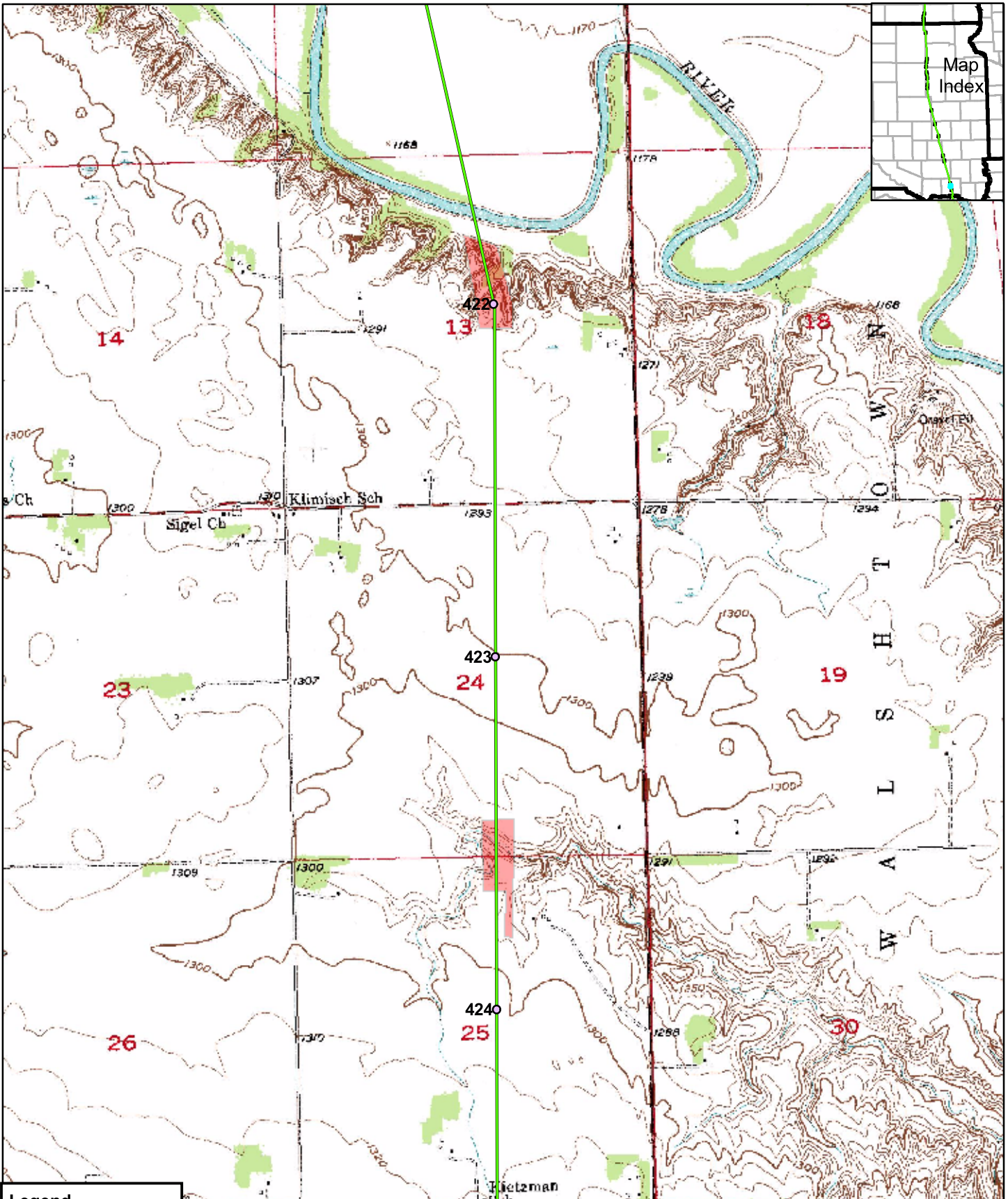




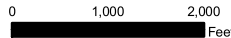
Feature TDH1SDYA002: Heavily grazed pasture with few forbs, which is dominated by blue grama (*Bouteloua gracilis*).



Legend

- Mileposts
- Proposed Centerline
- Surveyed Grasslands
- State Boundary
- County Boundary

Keystone Pipeline Project



Map 20 of 21
Surveyed
Grasslands

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Feature ID	Survey Date	Start MP	End MP	County	State	Survey Type	Habitat Quality	Suitable T&E Habitat?
TDH1SDYA001	9/14/2006	426.7	428.9	Yankton	SD	Site Visit	Low	No

Site Summary: This area is very heavily infested with plumeless thistle (*Carduus acanthoides*), especially in the lowland swale areas. The slopes and uplands are dominated by a mix of exotic pasture grasses, especially by smooth brome (*Bromus inermis*) and crested wheat grass (*Agropyron cristatum*). Native grasses and forbs occur in only a few areas.



Feature TDH1SDYA001: Smooth brome (*Bromus inermis*) dominated pasture.



Feature TDH1SDYA001: Overview of site to the south.



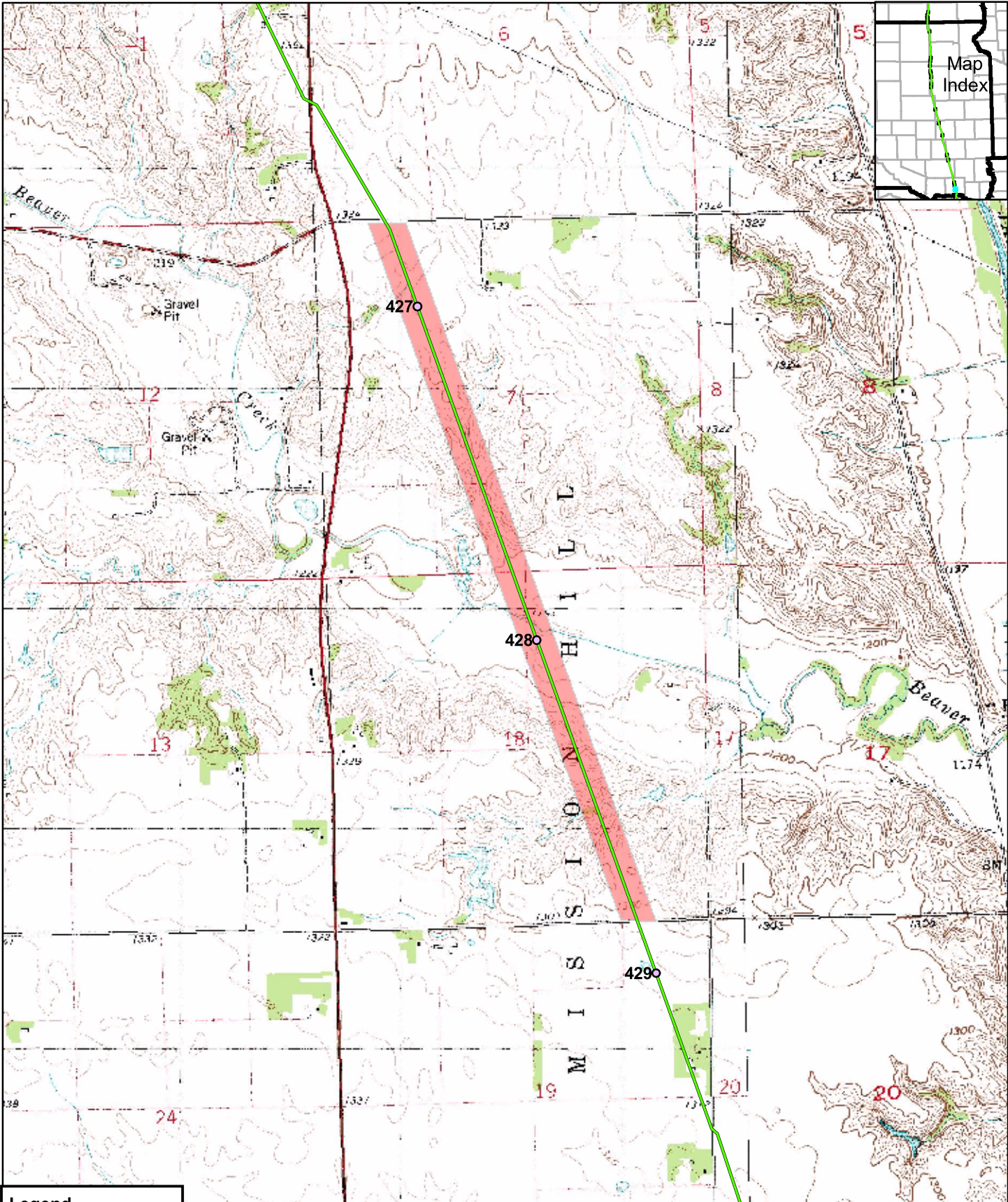
Feature TDH1SDYA001: Plumeless thistle (*Carduus acanthoides*) is abundant in the swales.



Feature TDH1SDYA001: View of a stock pond to the east of center line



Feature TDH1SDYA001: Smooth brome (*Bromus inermis*) at the southern edge of this site.




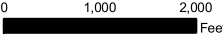
Legend

- Mileposts
- Proposed Centerline
- Surveyed Grasslands
- State Boundary
- County Boundary

Keystone Pipeline Project



TransCanada
In business to deliver

Map 21 of 21
Surveyed
Grasslands

Appendix II

Plant Species List

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Plant species identified in the three southernmost counties in North Dakota (Ransom, Sargent, and Dickey) and in all South Dakota counties between September 11 and September 16, 2006. These are species that occur along the Keystone pipeline corridor. This list could easily be expanded if these areas were visited in the spring or early summer. Plants with an asterisk (*) are not native to this region.

SCIENTIFIC NAME

COMMON NAME

FERNS AND FERN ALLIES

Equisetaceae / Horsetail family

Equisetum laevigatum A. Braun

smooth scouring rush, horsetail

GYMNOSPERMS

Cupressaceae / Juniper or Cedar family

Juniperus scopulorum Sarg.

Sabina, Rocky Mtn juniper, cedar

ANGIOSPERMS: Monocotyledons and Dicotyledons

Aceraceae / Maple family

Acer negundo L.

box elder

Amaranthaceae / Pigweed family

Amaranthus albus L.

**Amaranthus blitoides* Watson

**Amaranthus retroflexus* L.

tumble pigweed
prostrate pigweed
redroot pigweed

Anacardiaceae / Poison Ivy or Mango family

Rhus glabra L.

smooth sumac

Apocynaceae / Dogbane family

Apocynum cannabinum L.

Indian hemp, dogbane

Asclepiadaceae / Milkweed family

Asclepias speciosa Torrey

Asclepias stenophylla A. Gray

showy milkweed
whorled milkweed

Asteraceae / Sunflower family

Achillea millefolium L.

Ambrosia psilostachya DC.

**Ambrosia trifida* L. H-12099

Antennaria parvifolia Nutt.

**Arctium minus* (J. Hill) Bernhardt

**Artemisia absinthium* L.

Artemisia dracuncululus (L.) Poljakov

Artemisia frigida Torr.

Artemisia ludoviciana Nutt.

Aster cf. falcatus Lindl.

Aster cf. sericeus Vent

Bidens cernua L.

Brickellia eupatorioides (L.)

Carduus acanthoides* L. **Noxious

Carduus nutans* L. **Noxious

Cirsium arvensis* (L.) Scop. **Noxious

Cirsium undulatum (Nutt.) Sprengel

Conyza canadensis (L.) Cronquist

Coreopsis tinctoria Nutt.

Crepis spp.

yarrow, milenrama
western ragweed
giant ragweed
pussytoes
burdock
wormwood
wild tarragon
fringed sage
white sage, LA sage
frost flower
silky aster
nodding begger-ticks
large-flower brickell-bush
plumeless thistle
musk thistle
Canadian thistle
wavy-leaf thistle
horseweed
plains coreopsis
hawksbeard

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Asteraceae / Sunflower family (continued)

<i>Echinacea angustifolia</i> De Candolle	Echinacea, black sampson
<i>Euthamia graminifolia</i> (L.) Nutt.	Euthamia
<i>Grindelia squarrosa</i> (Pursh) Dun.	Curly-top gumweed, rosinweed
<i>Helianthus annuus</i> L.	common sunflower
<i>Helianthus maximiliani</i> Schrad.	Maximilian sunflower
<i>Helianthus petiolaris</i> Nutt.	plains sunflower
<i>Heterotheca villosa</i> (Pursh) Shinnery	golden aster
<i>Iva xanthifolia</i> Nutt.	marsh elder
<i>Lactuca</i> spp.	Blue lettuce
<i>Liatris ligulistylis</i> (A. Nelson) K. Schum,	blazing star
<i>Liatris mucronata</i> DC.	cusped blazing star
<i>Liatris punctata</i> Hook.	blazing star, gayfeather
<i>Lygodesmia juncea</i> (Pursh) Greene	skeletonweed, goldenweed
<i>Ratibida columnifera</i> (Nuttall) Wootton & Standley	prairie coneflower, Mexican hat
<i>Silphium laciniatum</i> L.	Compass plant
<i>Solidago canadensis</i> L.	Canada goldenrod
<i>Solidago missouriensis</i> Nuttall	Missouri goldenrod
<i>Solidago</i> spp.	goldenrod
<i>Taraxacum officinale</i> Weber	dandelion
<i>Tragopogon dubius</i> Scop	goat's beard, yellow salsify
<i>Vernonia</i> spp.	ironweed
* <i>Xanthium strumarium</i> Nutt.	Cocklebur, porcupine eggs

Boraginaceae / Four-o'clock family

<i>Onosmodium molle</i> Michaux.	Marbleseed, stoneseed,
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Cactaceae / cactus family

<i>Coryphantha vivipara</i> (Nutt.) Britt. & Rose	pincushion cactus
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Cannabaceae / Hemp Family

* <i>Cannabis sativa</i> L.	hemp, marijuana
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Caprifoliaceae / Honeysuckle family

<i>Sambucus canadensis</i> L.	common elderberry
<i>Symphoricarpos occidentalis</i> Hook.	snowberry

Chenopodiaceae / Goosefoot family

* <i>Chenopodium album</i> L.	lamb's quarters, goosefoot
<i>Chenopodium glaucum</i> L.	oak-leafed goosefoot
<i>Chenopodium leptophyllum</i> (Moq.) Nutt. ex. S. Wats	prairie goosefoot
* <i>Kochia scoparia</i> (L.) Schrad.	kochia, alkaliweed, fireweed
* <i>Salsola tragus</i> L. [<i>S. australis</i> , <i>S. iberica</i> & <i>S. kali</i>]	Russian thistle, tumbleweed

Convolvulaceae / Morning glory family

* <i>Convolvulus arvensis</i> L.	bindweed
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Cyperaceae / Sedge family

<i>Carex</i> spp.	Several sedges
<i>Schoenoplectus pungens</i> (M. Vahl) Palla	common threesquare bulrush
<i>Schoenoplectus validus</i>	softstem bulrush

Elaeagnaceae / Olive family

* <i>Elaeagnus angustifolia</i> L.	Russian olive
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Euphorbiaceae / Spurge family

Agaloma marginata (Pursh) Love & Love
Chamaesyce spp.
Euphorbia esula L. **NOXIOUS**
Poinsettia dentata (Michaux) Klotsch & Gracke

snow-on-the-mountain
spurges (several species)
leafy spurge
toothed spurge

Fabaceae / Legume Family

Amorpha canescens Pursh
Desmanthus illinoensis (Michx.) MacM,
Glycyrrhiza lepidota Pursh.
Lotus cf. purshianus Clem & Clem
**Medicago lupulina* L.
**Medicago sativa* L.
**Melilotus albus* Medikus
**Melilotus officinalis* (L.) Lam,
Pedimelum argophyllum (Pursh) J. W. Grimes
**Trifolium pratense* L.
**Trifolium repens* L.

leadplant
Illinois bundleflower
wild licorice
prairie trefoil, deer vetch
black medic, hop clover
alfalfa
white sweet clover
yellow sweet clover
silver scurf-pea
red clover
white clover, Dutch or Ladino clover

Juncaceae / Rush family

Juncus arcticus Willd. var. *balticus*
(Willd.) Trautv. [*J. balticus*]
Juncus nodosus L.
Juncus spp.

Baltic rush
knotted rush
Rush

Juncaginaceae / Arrowgrass family

Triglochin cf. martima L. **POISONOUS**

Arrowgrass (in fringed orchid habitat)

Lamiaceae / Mint Family

Lycopus americanus Muhlenberg ex W. Barton
**Nepeta cataria*

American bugleweed
catnip

Lemnaceae / Duckweed family

Lemna minor L

duckweed

Malvaceae / Mallow family

**Abutilon theophrasti* Medic
**Hibiscus trionum* L.
**Malva neglecta* L.
Sphaeralcea coccinea (Nutt.) Rydb.

velvet leaf
Flower-of-an-hour
Cheeseweed
scarlet globemallow, cowboy's delight

Moraceae / Mulberry family

**Morus alba* L

white mulberry

Nyctaginaceae / Four-o'clock Family

Mirabilis hirsuta (Pursh) MacMill.
Mirabilis spp.

hairy four o'clock
four o'clock

Onagraceae / Evening Primrose Family

Gaura villosa Torrey

hairy gaura

Orchidaceae / Orchid Family

Spiranthes magnicamphorum Sheviak

Great Plains Lady's tresses

Plantaginaceae / Plantain Family

Plantago lanceolata L.

English plantain