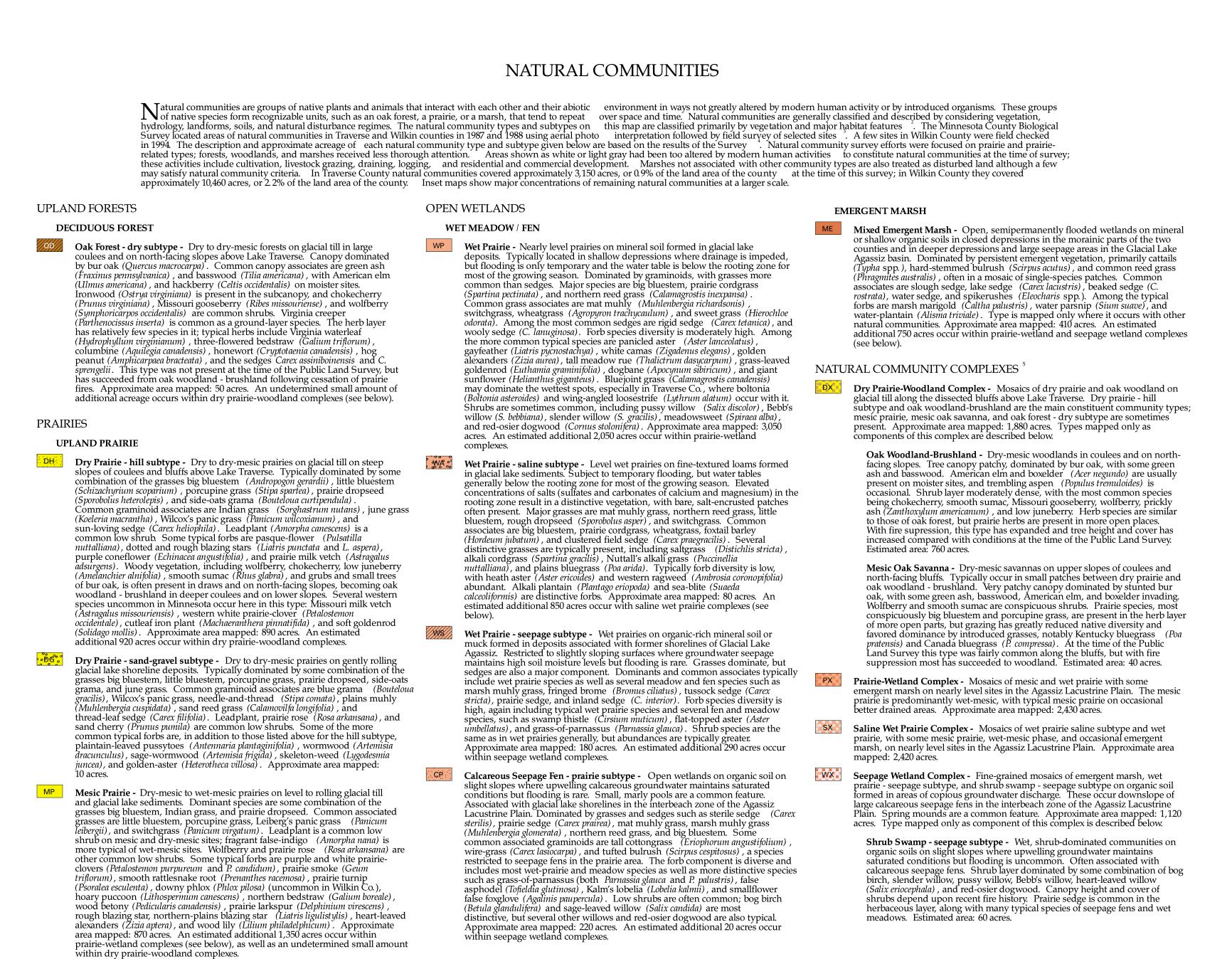
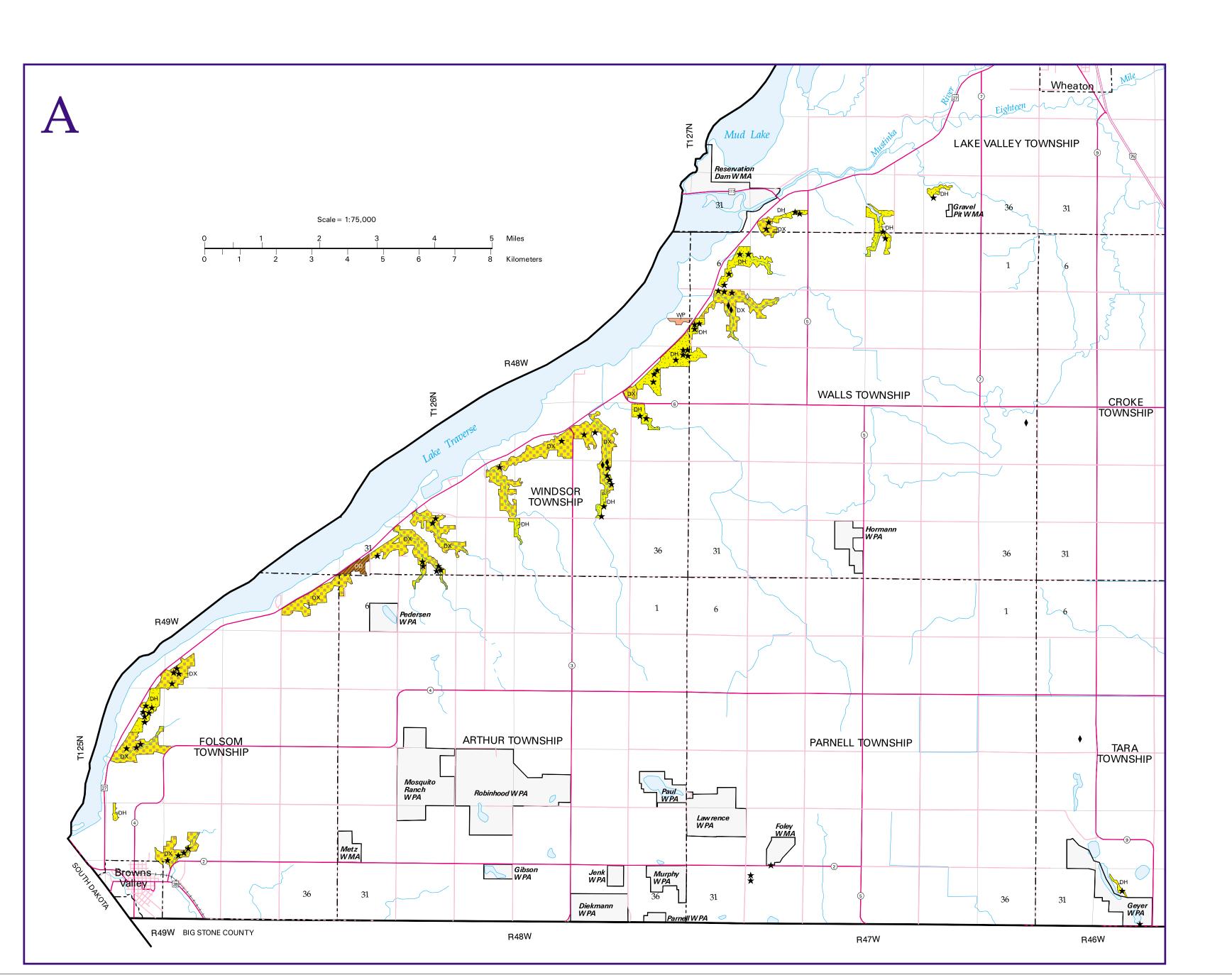


## NATURAL COMMUNITIES AND RARE SPECIES OF TRAVERSE AND WILKIN COUNTIES, MINNESOTA

Minnesota County Biological Survey





RARE SPECIES AND

ANIMAL AGGREGATIONS

Ocations of rare plants, rare animals, and selected animal aggregations are maintained in the Natural Heritage Information System . The

following rare species and animal aggregations have been found in Traverse and Wilkin counties. Mapped locations include both historical records and the results of field surveys conducted by the Minnesota County Biological Survey in 1987 and 1988. Most rare species are protected under the provisions of the Federal Endangered Species Act or the Minnesota Endangered Species Statute and associated Rules . An asterisk (\*) indicates that no recent observation (1970-1997) of that species has been confirmed. A dagger (†) indicates that the species has been documented in the county but its exact location is not determinable.

Red three-awn (Aristida purpurea var. longiseta) Sullivant's milkweed (Asclepias sullivantii) (Astragalus flexuosus) Astragalus missouriensis, Water-hyssop Bacopa rotundifolia) Prairie moonwort (Botrychium campestre) Plains reedgrass Calamagrostis montanensis Hall's sedge Northern singlespike sedge \* (Carex scirpoidea) Short-pointed umbrella-sedge (Cyperus acuminatus) Small white lady's-slipper esmanthus illinoensis) Few-flowered spike-rush Eleocharis quinqueflora) Wolf's spike-rush \* (Helianthus nuttallii ssp. rydbergii)

(Machaeranthera vinnatifida)

(Rhynchospora capillacea)

Cutleaf ironplant

Hair-like beak-rush

Whorled nut-rush

Soft goldenrod

★ Plants, federally- or state-listed

♦ Animals, federally- or state-listed Nelson's sharp-tailed sparrow (Ammodramus nelsoni) Chestnut-collared longspur Calcarius ornatus) Piping plover\* (Charadrius melodus) (Coturnicops noveboracensi: Marbled godwit (Limosa fedoa) Wilson's phalarope (Phalaropus tricolor) Burrowing owl (Speotyto cunicularia) Greater prairie-chicken (Tympanuchus cupido)

Fish
Lake sturgeon

Mussels
Creek heelsplitter mussel
Fluted-shell mussel
Black sandshell mussel

Insects

Clasmigona compressal
(Lasmigona costata)
(Ligumia recta)

(Ligumia recta)

Dakota skipper (Hesperia dacotae)
Powesheik skipper (Oarisma powesheik)

Animals, previously state-listed \*

Birds

Helped send ringer (Partrevia leveige de)

Upland sandpiper (Bartramia longicauda)
American bittern (Botaurus lentiginosus)

Colonial waterbird nesting siteSandhill crane migratory roost

Sandhill crane migratory roost

 Greater prairie-chicken booming ground

MISCELLANEOUS FEATURES

Section linesCity and township linesManaged area statutory boundaries

(WMA = State Wildlife Management Area)
(WPA = Federal Waterfowl Production Area)

Disturbed land in public ownership within statutory boundaries of managed areas

Disturbed land in public ownership within statutory of managed areas

Primary roads

Secondary roads

Other roads

Railroads

Rivers, streams, and ditches

Lakes and Rivers - open water, sometimes with beds of submergent vegetation. Approximate total area: 7,660 acres.

MINNESOTA COUNTY BIOLOGICAL SURVEY

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Acknowledgements
Various DNR regional and area staff assisted with field work and map review. The staff of the National Wetlands Inventory, U. S. Fish and Wildlife Service, provided access to aerial photography and stereo viewing equipment. The two county offices of the Farm Service Agency, U.S. Department of Agriculture, provided aerial imagery of selected sites. We sincerely thank all of these individuals and agencies for their help.

The Minnesota County Biological Survey is a systematic survey of rare biological features.
 The goal of the Survey is to identify significant natural areas and to collect and interpret data on the distribution and ecology of rare plants, rare animals, and natural communities.
 Minnesota Natural Heritage Program. 1993. Minnesota's native vegetation: A key to natural communities, version 1.5. Minnesota Department of Natural Resources, St. Paul, Minnesota.

111 pp.
3 Natural community boundaries were originally delineated for Wilkin Co. by photointerpretation from 1:65,000 color infrared (CIR) aerial photography taken 22 April, 2 May, and 15 May 1982 (National Aeronautics and Space Administration, Ames Research Center) and for Traverse Co. from 1:58,000 CIR photography taken 17 April, 18 April, and 28 October 1984 (National High Altitude Photography Program, USGS, U.S. Department of the Interior). Final delineation for both counties is based on 1:40,000 CIR aerial photography taken 19 and 20 April and 13 May, 1991 and 3 May 1992 (National Aerial Photography Program, USGS, U.S. Department of the Interior). Photocopies of black and white aerial photographs obtained from the county offices of the Farm Service Agency, U.S. Department of Agriculture (various dates, scale approximately 1:7900) were also used. Mapping reflects conditions as of the 1991-92 aerial photography. Natural community boundaries were digitized at a scale of 1:24,000.

the Farm Service Agency, U.S. Department of Agriculture (various dates, scale approximately 1:7900) were also used. Mapping reflects conditions as of the 1991-92 aerial photography. Natural community boundaries were digitized at a scale of 1:24,000.
4. Acreage figures for mapped types are approximate to the nearest 10 acres.
5. Complexes are mapped where the patch size of the constituent community types is too small for mapping at the standard MCBS scale (1:24,000), or where available information is insufficient for confident mapping of boundaries within mosaics of types.

for confident mapping of boundaries within mosaics of types.
6. Data are available from the Minnesota Natural Heritage Information System, Department of Natural Resources, St. Paul, Minnesota. Phone (612) 296-2835.
7. Endangered Species Act of 1973 (16 USCA 1531 et seq.); Minnesota Statutes, section 84.0895, and Minnesota Rules, Part 6212.1800 to 6212.2300. Additional information on rare species is available in *Minnesota's Endangered Flora and Fauna*, edited by B. Coffin and L. Pfannmuller, University of Minnesota Press, Minneapolis, 1988.

University of Minnesota Press, Minneapolis, 1988.
 These species were listed under the provisions of the Minnesota Endangered Species Statute when the Minnesota County Biological Survey was conducted in the county. New information on their distribution and abundance has since resulted in their removal from the state list.
 Civil division, transportation, water features, and state-owned managed area boundary data were obtained from the Department of Natural Resources, St. Paul, Minnesota. Waterfowl Production Area boundary data were obtained from the U.S. Fish and Wildlife Service. Every effort was made to obtain current versions of these data; however, errors may exist on this map.

Land ownership within managed areas is sometimes obscured by natural community map units.

10. Marschner, F. J. 1974. The original vegetation of Minnesota (map, scale 1:500,000). USDA Forest Service, North Central Forest Experiment Station, St. Paul, Minnesota (redraft of the original 1930 edition). The Public Land Survey records include information about the trees that were marked as "witness" or "bearing" trees at the section, quarter-section, and meander corners: the kind of tree, its diameter at breast height, and its distance and compass direction from the corner. Also included are notes about features encountered along section lines and summary descriptions of each township.