COMPOSITION OF PRAIRIE STANDS IN SOUTHERN MICHIGAN AND ADJOINING AREAS

PAUL W. THOMPSON

Cranbrook Institute of Science, P.O. Box 801, Bloomfield Hills, Michigan 48013

Abstract. Prairie plants, 204 species in all, were tabulated for 26 prairie study stands mostly located in southern Michigan.

INTRODUCTION

A number of prairie stands of various types and sizes are scattered through southern Michigan. Although none of these are extensive, quite a few possess considerable diversity. I visited 26 of these sites at different periods of the growing season during the years 1972-81 to observe the composition of the areas (Fig. 1, Table 1). A number of these consist of strip prairies—long, narrow prairie stands extending along railroad rights-of-way. These often exhibit a variety of ecological communities found where conditions range from low, wet habitats along ditches to dry or mesic conditions occurring on higher ground. Some of the stands are fens where slightly alkaline conditions exist.

DISCUSSION OF DATA

The data show that a number of the species are quite rare in this region (Table 2). *Aster sericeus, A. ptarmicoides, Cerastium nutans, Linum sulcatum, Opuntia compressa,* and *Geum triflorum* are found only on dry prairies such as

TABLE 1. List of prairie sites visited.

REFERENCE	SYMBOL	PRAIRIE SITE	COUNTY	LOCATION
Thompson (1975)	A	Algonac St. Park	St. Clair	W of campground, M29 N of Algonac
Thompson (1968)	AA	Ann Arbor	Washtenaw	N of Nichols Arboretum, S bank of Huron River
	A1	Allegan	Allegan	Near 52 St. & 126 Ave., 13 mi. NW of Allegan
	**B	Bowens Mill Fen	Barry	Bowens Mill Rd. at Bassett Lk. Rd., 3 mi. S of Middleville
	**C	Concord Fen	Jackson	Eckert Rd. ¼ mi. of Lippert Rd., 3 mi. S of Concord
Thompson (1978)	**D	Dayton	Berrien	Curran Rd. at McCoy Creek, 2 mi. SE of Dayton
Thompson (1975)	*F	Fairfax RR	St. Joseph	M86 at W edge of Fairfax
	*FB	Fruitbelt RR	Kalamazoo	W of 4 St., N of O Ave., W of Kalamazoo
	G	German Settlers Cemetery	Lake, Ind.	E side of US-41, 1½ mi. S of Cedar Lake, Ind.
	**H	Helmer Brook	Calhoun	NW of Helmer & Harmonia Rds., NW Battle Creek
Thompson (1975)	**I	Indian Bowl	Berrien	E bank of St. Joseph River in Berrien Springs, N of Dean Hill Rd.
Thompson (1975)	J	Jackson RR	Jackson	RR W of Sharp Golf Club, E of Parks Rd., in Jackson
	*K	Klumbis Rd. RR	Cass	RR at Klumbis Rd., betw. Wells & Springs Rds., NE of Pokagon
Bliss & Cox (1964)	L	Lucy Prairie	Lake, Ind.	SE corner of US-41 & US-231, S of St. John, Ind.
	**M	McCoy Fen	Berrien	RR SW of Buchanan at McCoy Creek
Hauser (1953)	N	Newaygo Prairies	Newaygo	Areas near Muskegon River & Oak Rd., 6 mi. E of Newaygo
Thompson (1975)	*O	Otter Creek RR	Monroe	RR betw. S Otter Creek & Cousins Rds., 3 mi S of Monroe
	P	Petersburg	Monroe	Game area on Teal Rd., 2 mi. S of Petersburg
	*PC	Parma-Concord RR	Jackson	RR betw. Parma & Bath Mills Rd.
Walpole (1924)	**R	Riverbank	Washtenaw	Highland Cemetery, River & Holmes Rds., Ypsilanti
Thompson (1975)	*S	West Sturgis RR	St. Joseph	RR 4 mi W of Sturgis at Shimmel Rd.
Walpole (1924)	Sh	Shanghai	Washtenaw	RR & Huron River, 1 mi E of Dixboro Rd., Ann Arbor
Thompson (In press)	SJ	St. Johns	St. Clair	M29 3 mi W of Algonac
	*Th	Thompson RR	Cass	Thompson Rd. at RR, N of White Rd., 1 mi SW of Pokagon
	**T	Teeple Lake Fen	Oakland	Highland Recr. Area NW edge of Teeple Lake
Rogers (1966)	W	Ojibway	Essex	Matchette & Titcombe Rds., S edge of Windsor, Canada

*RR strip prairie stand

**Fen community occupying at least a portion of the site

TABLE 2. Prairie species of stands in southern Michigan and adjoining areas. Key to stands in Table 1. Nomenclature follows Gleason (1952) in some respects.

	Sh	AA	W	L	G	O	PC	FB	Th	K	J	S	F	A	P	Al	N	I	T	C	B	H	M	D	E	SJ
Composites																										
Achillea millefolium	*	*	*	*		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Antennaria spp.	*	*		*		*	*	*				*	*		*	*	*			*	*	*			*	*
Artemisia caudata																*	*				*					
Aster azureus			*	*	*			*			*		*	*		*	*		*		*					
A. ericoides	*	*	*	*		*				*				*			*		*						*	*
A. faxoni	*		*	*	*										*			*	*				*			*
A. junciformis	*																	*	*	*					*	
A. laevis	*	*	*	*		*	*	*	*		*	*	*	*	*			*	*		*				*	
A. lateriflorus	*	*	*	*							*							*	*	*				*	*	*
A. lucidulus		*					*				*			*				*	*			*	*	*	*	
A. novae-angliae	*	*	*	*	*	*	*	*	*	*	*		*	*	*			*	*	*	*		*	*	*	*
A. pilosus	*	*	*	*	*	*	*	*	*		*	*	*	*	*	*	*	*	*	*			*	*	*	*
A. ptarmicoides																	*									
A. prealtus		*													*			*	*					*	*	
A. puniceus		*												*		*		*	*	*	*		*	*	*	*
A. sagittifolius	*	*	*					*	*		*		*	*		*		*	*		*				*	
A. sericeus																	*									
A. simplex		*				*	*		*		*			*			*	*		*	*		*		*	*
A. umbellatus	*	*	*			*	*				*		*	*	*			*	*	*				*	*	*	
Bidens connata		*				*								*										*	*	*
B. trichosperma									*					*											*	
Cacalia tuberosa																					*		*			
C. atriplicifolia		*				*		*		*				*		*	*				*	*	*			
Chrysanth.leucanthemum	*	*	*	*		*	*	*	*	*	*			*	*	*		*	*	*	*	*		*	*	*
Cirsium discolor	*	*	*	*		*				*	*		*	*	*								*		*	*
C. muticum		*	*											*		*		*	*	*	*	*	*	*	*	*
Coreopsis palmata				*	*			*	*	*		*									*					
C. tripteris	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*					*	*	*	*	*	*	*
Erigeron strigosus	*	*	*	*	*		*	*	*	*	*	*	*	*	*	*	*	*	*		*	*	*	*	*	*
E. altissimum						*																				
E. perfoliatum	*	*	*	*	*	*	*	*	*	*	*	*		*	*	*	*	*	*	*	*		*	*	*	*
Eupatorium maculatum	*	*	*			*	*		*		*		*	*	*			*	*	*	*		*	*	*	*
Helenium autumnale										*				*		*		*							*	*
Helianthus gigantea	*	*	*			*	*		*		*			*				*	*	*			*	*	*	*
H. grosse serrata	*	*	*	*	*	*	*				*			*	*			*	*	*			*	*	*	*
H. maximiliani		*	*			*								*				*								
H. occidentalis	*			*	*		*	*	*			*	*			*	*				*		*		*	
Heliopsis helianthoides		*							*					*				*					*			
Lactuca canadensis	*	*	*	*		*	*	*		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Liatris aspera	*	*		*		*	*	*						*	*	*	*				*	*	*			
L. cylindracea																*	*								*	
L. novae-angliae	*														*										*	
L. spicata			*	*	*									*		*		*		*	*		*			*

TABLE 2, continued

	Sh	AA	W	L	G	O	PC	FB	Th	K	J	S	F	A	P	Al	N	I	T	C	B	H	M	D	R	SJ
Parthenium integrifolium				*	*																					
Prenanthes racemosa		*	*				*						*	*				*	*	*	*					*
Ratibida pinnata	*	*	*	*	*	*	*	*	*	*	*	*		*							*	*	*		*	
Rudbeckia hirta	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
R. laciniata																					*		*		*	
R. sullivantii																		*					*		*	
Senecio pauperculus	*			*			*			*			*			*	*	*	*	*	*	*	*	*	*	*
Silphium integrifolium				*	*				*	*	*	*						*	*				*	*		
S. laciniatum				*	*																					
S. terebinthinaceum	*	*	*	*	*	*	*	*	*		*			*						*		*	*	*	*	
Solidago altissima	*	*	*	*	*	*	*	*	*	*	*		*	*	*			*	*	*	*		*	*	*	*
S. canadensis	*	*	*	*	*	*	*	*	*	*	*		*	*	*			*	*	*	*		*	*	*	*
S. gigantea	*	*	*	*	*	*	*				*			*	*			*	*	*	*	*	*	*	*	*
S. graminifolia	*	*	*	*	*		*	*	*	*	*			*				*	*	*	*	*	*	*	*	*
S. juncea	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*		*	*	*	*
S. nemoralis	*	*	*	*	*	*	*	*	*	*	*		*	*	*	*	*		*		*	*		*	*	*
S. ohioensis														*					*	*		*	*	*	*	*
S. patula																*		*	*		*		*		*	
S. rigida	*	*	*	*	*	*	*	*	*	*	*	*	*	*			*			*	*	*			*	
S. rugosa		*	*				*							*	*			*	*	*	*		*	*	*	
S. riddellii	*	*	*			*					*			*				*	*	*	*		*	*	*	*
S. speciosa	*	*	*	*			*	*	*	*	*			*	*	*	*		*	*	*	*				
S. uliginosa																		*	*	*			*	*		
Vernonia missurica	*	*	*	*		*		*	*		*	*	*	*	*			*	*		*		*	*	*	*
Figworts																										
Castilleja coccinea																		*		*						
Gerardia purpurea						*								*	*			*	*				*		*	*
Pedicularis lanceolata	*	*	*			*					*			*			*	*	*	*			*	*	*	*
Penstemon hirsutum	*		*				*				*				*	*	*			*	*				*	
Veronicastrum virginicum	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*		*	*	*		*		*	*	*	*
Grasses																										
Andropogon gerardii	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*		*	*	*	*
A. scoparius	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*		*		*	*	*		*	
Aristida spp.				*				*							*	*	*		*		*					
Bouteloua curtipendula																									*	
Bromus ciliatus																							*		*	
B. inermis	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*		*	*		*		*
Calamagrostis canadensis	*	*	*	*	*	*	*		*		*	*	*	*	*			*	*	*	*		*	*	*	*
Danthonia spicata				*											*	*	*									
Elymus canadensis	*		*	*		*	*	*			*			*	*	*	*	*	*	*			*	*	*	
Hierochloe odorata			*				*										*			*			*	*	*	
Koeleria cristata																*									*	
Muhlenbergia spp.	*	*		*					*								*	*		*	*		*	*	*	

TABLE 2, continued

	Sh	AA	W	L	G	O	PC	PB	Th	K	J	S	F	A	P	Al	N	I	T	C	B	H	M	D	R	SJ
Panicum implicatum						*					*						*			*					*	*
P. leibergii	*			*						*															*	
P. oligosanthes									*	*							*				*		*			
P. virgatum			*	*	*	*	*		*	*	*		*				*		*				*			*
Sorgastrum nutans	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*		*	*	*	*
Spartina pectinata	*	*	*	*	*	*			*		*		*	*		*	*	*	*		*		*	*	*	*
Sporobolus cryptandrus			*							*							*									
S. heterolepis				*																	*					
Stipa spartea					*										*	*	*				*				*	
Legumes																										
Amorpha canescens					*			*				*									*					
Apios americana	*	*	*			*	*		*		*			*	*			*			*		*	*	*	
Baptisia leucantha				*	*		*						*													
B. tinctoria			*	*		*								*	*											
Cassia fasciculata				*																						
Desmodium canadense	*	*	*			*	*		*					*	*		*	*	*		*		*	*	*	
D. illinoense	*	*					*		*			*	*	*					*		*			*		
D. marilandicum	*							*					*								*					
D. sessilifolium																			*							
Lathyrus palustris			*			*								*		*		*	*	*		*	*	*	*	*
Lespedeza capitata	*	*	*	*		*	*	*	*	*	*		*	*	*		*		*	*	*			*	*		
L. hirta								*	*	*				*	*	*	*			*					*	
Lupinus perennis	*						*	*		*		*		*	*	*	*			*	*	*	*			
Melilotus alba	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Petalostemum purpureum				*	*																					
Tephrosia virginiana					*			*								*	*				*	*				
Lilies																										
Aletris farinosa			*				*								*				*	*	*					
Allium cernuum	*	*		*	*				*					*				*		*			*	*	*	
Camassia scilloides				*																						
Lilium michiganense	*	*	*				*					*		*				*	*	*	*	*	*	*	*	
Tofieldia glutinosa																			*	*	*		*		*	
Zygadenus glaucus			*															*		*	*		*		*	
Milkweeds																										
Acerates viridiflora			*													*	*				*					
Apocynum sibiricum		*	*	*		*	*	*	*	*	*	*		*	*	*	*	*	*	*	*	*	*	*		*
Asclepias incarnata	*	*	*			*			*		*							*	*	*	*		*	*		
A. amplexicaulis								*								*										
A. syriaca	*	*	*	*		*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
A. sullivantii			*			*								*												
A. tuberosa	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*		*		*	
A. verticillata										*	*	*									*					

TABLE 2, continued

	Sh	AA	W	L	G	O	PC	FB	Th	K	J	S	F	A	P	Al	N	I	T	C	P	H	M	D	R	SJ
Mints																										
Lycopus americanus	*		*			*									*			*	*	*	*			*	*	*
L. uniflorus	*		*																	*	*				*	
Mentha arvensis			*											*	*			*	*					*	*	
Monarda fistulosa	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Pycnanthemum virginianum	*	*	*	*	*	*	*		*		*	*		*	*			*	*	*	*	*	*	*	*	*
Roses																										
Filipendula rubra																		*				*				
Fragaria virginiana	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Geum triflorum																	*									
Potentilla arguta			*								*					*	*									
P. canadensis	*		*	*	*	*	*	*	*	*	*			*	*	*	*	*	*	*	*	*	*	*	*	
P. fruticosa																			*	*	*	*	*		*	
Crowfoots																										
Anemone canadensis	*	*	*			*	*		*		*			*		*	*		*	*	*				*	*	
A. cylindrica	*								*	*		*	*	*	*		*		*		*				*		
A. virginiana	*	*	*				*		*		*				*		*			*	*			*	*		
Caltha palustris		*					*						*		*				*	*			*	*	*	*	
Ranunculus fascicularis															*	*					*						
Thalictrum dasycarpum	*	*	*			*	*		*	*	*	*		*			*	*	*	*	*	*	*	*	*	*	
Rushes																										
Juncus dudleyi			*								*															
J. greenei																	*				*					
Umbels																										
Angelica atropurpurea		*					*		*									*		*		*	*	*		
Daucus carota	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Eryngium yuccifolium				*	*				*			*											*			
Oxypolis rigidior		*	*	*			*				*			*				*		*	*	*	*	*	*	
Zizia aurea	*	*		*	*	*	*	*	*	*	*	*			*			*		*	*	*	*	*	*	*
Shrubs																										
Ceanothus americana	*		*	*				*	*	*						*					*		*	*	*	
Celastrus scandens	*	*	*														*									*
Corylus americana			*				*	*	*	*							*		*	*	*	*	*	*	*	
Rhus copallina			*				*				*				*	*										
R. glabra	*	*	*	*			*				*														*	*
Rubus flagellaris	*	*		*	*		*	*	*	*	*				*	*			*	*	*	*	*			
Salix humilis	*	*	*	*		*	*	*	*	*					*						*	*	*		*	
Other species																										
Equisetum arvense	*	*	*			*	*											*		*		*	*	*	*	
E. laevigatum							*								*			*		*		*	*	*	*	
Onoclea sensibilis	*					*	*		*		*	*			*	*		*	*	*	*	*	*	*	*	
Thelypteris palustris	*	*	*			*	*		*		*				*	*		*	*	*	*	*	*	*	*	*
Tradescantia ohiensis			*	*	*	*	*	*	*	*	*	*		*		*	*	*		*	*	*	*	*	*	
Hypoxis hirsuta			*	*		*	*				*			*	*			*		*	*	*	*	*	*	*

TABLE 2, continued

	Sh	AA	W	L	G	O	PC	FB	Th	K	J	S	F	A	P	Al	N	I	T	C	B	H	M	D	R	SJ
Iris shrevei	*	*	*	*		*	*	*						*	*	*		*	*	*		*	*	*	*	*
Sisyrinchium albidum	*			*	*	*	*		*	*	*	*						*	*	*	*	*	*	*	*	
Cypripedium calceolus	*																					*				*
C. candidum																		*		*			*	*		*
Habenaria lacera						*															*					
Spiranthes cernua	*					*						*		*	*			*	*		*		*			*
S. romanzoffiana																		*							*	
Comandra richardsiana	*		*	*	*		*	*	*	*		*	*		*	*	*	*		*	*	*	*	*	*	*
Arenaria stricta																*										
Cerastium nutans																	*									
Stellaria longifolia											*							*							*	
Heuchera richardsonii	*			*	*	*	*		*		*	*		*			*	*		*		*			*	
Parnassus glauca	*	*												*				*	*	*	*		*	*	*	
Saxifraga pensylvanica		*		*			*		*							*	*	*		*		*	*	*	*	
Linum sulcatum																*	*									
Polygala senega																		*			*				*	
Euphorbia corollata	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*		*	
Helianthemum canadense	*	*				*							*	*		*	*	*			*				*	
Viola cucullata																*		*							*	
V. pedata-pedatifida										*						*	*				*					
V. sagittata				*									*			*	*				*					
Opuntia compressa																*	*									
Lythrum alatum		*	*			*					*			*				*	*			*				*
Oenothera biennis	*	*	*			*		*		*			*	*	*	*	*	*	*		*		*	*	*	*
Gaura biennis			*			*					*															
Dodecatheon meadia				*	*																		*	*		
Steironema quadriflorum	*	*	*											*	*	*	*	*	*	*	*			*	*	*
Gentiana alba	*								*	*																
G. andrewsii			*			*			*		*			*	*			*			*		*	*		*
G. crinita-procera			*								*							*		*	*		*		*	
G. puberula				*																						
Swertia caroliniensis										*						*		*								
Phlox maculata																							*	*		
P. pilosa		*	*	*	*		*				*	*		*						*	*	*			*	
Polemonium reptans																		*				*	*			
Lithospermum canes.-caro.	*		*	*	*				*	*		*	*			*	*			*	*	*			*	
Galium boreale	*	*	*	*			*		*	*				*					*	*	*	*	*	*	*	*	*
Valeriana ciliata																		*	*	*	*	*	*	*	*	
V. septentrioalis																									*	
Campanula aparinoides	*	*																*	*	*			*		*	
Lobelia kalmii																		*	*	*	*		*	*	*	
L. siphilitica																*		*	*	*	*		*	*	*	
L. spicata	*		*	*		*								*	*	*	*		*		*					*

Newaygo and Allegan. *Camassia scilloides, Cassia fasciculata,* and *Gentiana puberula* were observed only at Lucy Prairie, which is situated at the southwest edge of the study region. *Silphium laciniatum* and *Petalostemum purpureum* occur only at this location and at German Settlers cemetery. *Dodecatheon meadia* provides a showy display at both of these sites but is only of limited occurrence at McCoy and Dayton fens. *Cacalia tuberosa* is found at McCoy and Bowens Mill sites, whereas *Filipendula rubra* occurs only at Helmer Brook and Indian Bowl. *Phlox maculata* is a rare species limited to Dayton and McCoy fens.

Species conspicuous in fens include *Lobelia kalmii, Cypripedium candidum, Potentilla fruticosa, Gentiana crinita* or *procera, Valeriana edulis* var. *ciliata,* and *Zygadenus glaucus.* Other species are *Lobelia siphilitica, Castilleja coccinea, Tofieldia glutinosa, Polemonium reptans,* and *Solidago patula.*

Data suggest that *Asclepias sullivantii, Sanguisorba canadensis,* and *Gaura biennis* are confined to the eastern portion of the region, where *Amorpha canescens, Asclepias amplexicaulis, Tephrosia virginiana, Eryngium yuccifolium, Dodecatheon meadia,* and *Polemonium reptans* are largely limited to the western section of the study area.

It is evident that a number of species are common on most of the prairie sites. As a group, asters and goldenrods occur quite frequently on prairies. Most of the other members of the composites listed fall in the same category except for a few rarer species such as *Parthenium integrifolium, Liatris novae-angliae,* and *Eupatorium altissimum.* Common species in other families include *Fragaria virginiana, Potentilla canadensis, Thalictrum dasycarpum, Desmodium canadense, Lespedeza hirta* and *L. capitata, Melilotus alba, Zizia aurea, Monarda fistulosa, Pycnanthemum virginianum,* and *Euphorbia corollata.* Also, widespread are *Daucus carota, Onoclea sensibilis, Thelypteris palustris, Tradescantia ohiensis, Sisyrinchium albidum, Comandra umbellata* var. *decumbens, Oenothera biennis, Lithospermum canescens, Galium boreale, Apocynum sibiricum, Asclepias syriaca,* and *A. tuberosa.* Still other frequent species are *Veronicastrum virginicum, Andropogon gerardii, A. scoparius, Bromus inermis, Calamagrostis canadensis, Elymus canadensis, Panicum virgatum, Spartina pectinata, Sorghastrum nutans, Rubus flagellaris,* and *Salix humilis.*

The largest group represented on the various prairie sites is the composite family; the next largest group is the grass, and the third largest, the legume family.

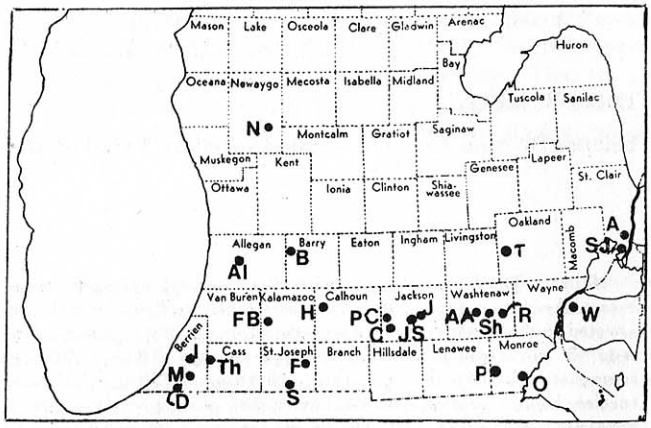

FIG. 1. Location of prairie stands in southern Michigan. Symbols listed in Table 1.

ACKNOWLEDGMENTS

Most of the species list was based on field data I collected from surveys of the different prairie sites. However, a few missing species were added by other investigators. I wish to thank the following for this material: Heidi Appel, Kim Chapman, Margaret Kohring, Ronald Kapp, Max Medley, Daniel Nepstad, Robert Pleznac, Edward Scharrer, and Leon Schaddelee. I thank Cranbrook Institute of Science for research funds.

LITERATURE CITED

Bliss, L. C., and G. W. Cox. 1964. Plant community and soil variation within a northern Indiana prairie. Am. Midl. Nat. 72:115-28.

Gleason, H. A. 1952. The New Britton and Brown Illustrated Flora of the Northwestern United States and Adjacent Canada. Lancaster Press, Lancaster, Pennsylvania.

Hauser, R. S. 1953. An ecological analysis of the isolated prairies of Newaygo County, Michigan. Ph.D. Diss. Mich. St. Univ., East Lansing.

Rogers, C. M. 1966. A wet prairie community at Windsor, Ontario. Can. Field-Nat. 80:195-99.

Thompson, P. W. 1968. A wet prairie community in Ann Arbor, Michigan. Mich. Acad. 2:87-94.

———. 1975. The floristic composition of prairie stands in southern Michigan. Pp. 317-331 *in* Prairie: A Multiple View (M. K. Wali, ed.). Univ. N.D. Press, Grand Forks.

———. 1978. Flora of Dayton Prairie, a remnant of Terre Coupee Prairie, in Michigan. Pp. 148-150 *in* Proceedings of the Sixth North American Prairie Conference (R. L. Stuckey and K. J. Reese, eds.). Ohio Biol. Surv., Biol. Notes No. 15.

———. In press. Floristics and ecology of St. Johns Prairie, Michigan. *In* Proceedings of the Seventh North American Prairie Conference. Southwest Mo. St. Univ., Springfield.

Walpole, B. A. 1924. Flora of Washtenaw County, Michigan. Dept. Nat. Sci., Mich. St. Normal Coll., Ypsilanti.