

Appendix I. Plant-insect visitor matrix at Living Prairie Museum, the Tall Grass Prairie Preserve, and Birds Hill Provincial Park, Manitoba

Order:	Family:	Name:	<i>Achillea millefolium</i> L.	<i>Aoposervis glauca</i> (Pursh) Rat.	<i>Amorpha nana</i> Nutt.	<i>Astragalus adsurgens</i> Pall.	<i>Astragalus agrestis</i> Dougl.	<i>Campanula rotundifolia</i> L.	<i>Cirsium flodmanii</i> (Rydb.) Arthur	<i>Dalea purpurea</i> Vent.	<i>Dasiphora fruticosa</i> (L.) Rydb.	<i>Eriogon glabellus</i> Nutt.	<i>Eriogon striposus</i> Muhl. ex Wild.	<i>Gaillardia aristata</i> Pursh	<i>Galium boreale</i> L.	<i>Helianthus maximiliani</i> Schrad.	<i>Heterotheca subhomboides</i> Rydb.	<i>Heuchera villosa</i> (Pursh) Shin.	<i>Houstonia richardsonii</i> R. Br.	<i>Liatris ligulistylis</i> (A.Nels.) Schum.	<i>Liliospermum canescens</i> (Michx.) Lemm.	<i>Lobelia spicata</i> Lam.	<i>Monarda fistulosa</i> L.	<i>Packera fistulosa</i> L.	<i>Pedicularis flattensis</i> (Nutt.) Weber & A.Love.	<i>Rosa arkansana</i> Porter	<i>Rudbeckia hirta</i> L.	<i>Sisyrinchium montanum</i> Greene	<i>Solidago canadensis</i> L.	<i>Solidago nemoralis</i> Ait.						
Diptera	Syrphidae	<i>Eristalis tenax</i> (L., 1758)	O																																	
Hymenoptera	Andrenidae	<i>Andrena alleghaniensis</i> Viereck, 1907																																		
		<i>Andrena asteris</i> Robertson																																		
		<i>Andrena krigiana</i> ? Robertson, 1901																																		
		<i>Andrena scutellinitens</i> ? Viereck, 1917																																		
		<i>Andrena</i> sp. #1 Fabricius, 1775							T ¹																											
		<i>Andrena</i> sp. #2 Fabricius, 1775																																		
		<i>Pedita swenki</i> Crawford, 1915																																		
		<i>Pseudopanurgus nebrascensis</i> Crawford, 1903																																		
	Apidae	<i>Apis mellifera</i> L., 1758		L ²																																
		<i>Bombus bifarius</i> Cresson, 1878																																		
		<i>Bombus borealis</i> Kirby, 1837				B ⁵																														
		<i>Bombus fervidus</i> (Fabricius, 1798)																																		
		<i>Bombus perplexus</i> Cresson, 1863					L ¹	O																												
		<i>Bombus rufocinctus</i> Cresson, 1863																																		
		<i>Bombus ternarius</i> Say, 1863																																		
		<i>Bombus vagans</i> Say, 1837																																		
		<i>Epeolus</i> sp. Latreille, 1802																																		
		<i>Nomada</i> sp. Scopoli, 1770																																		
		<i>Melissoides rustica</i> (Say, 1823)																																		
	Colletidae	<i>Hylaeus affinis</i> Smith, 1853																																		
		<i>Hylaeus</i> sp. Fabricius, 1775																																		
	Halictidae	<i>Agapostemon texanus texanus</i> Cresson, 1872	T ¹																																	
		<i>Lasioglossum anomalum</i> (Robertson, 1892)																																		
		<i>Lasioglossum coriaceum</i> (Smith, 1853)																																		
		<i>Lasioglossum fuscipenne</i> (Smith, 1853)	T ¹																																	
		<i>Lasioglossum leucocomum</i> Lovell, 1908																																		
		<i>Lasioglossum leucozonium</i> (Schrank, 1781)																																		
		<i>Lasioglossum pruinatum</i> (Robertson, 1892)	T ¹																																	
		<i>Lasioglossum succinipenne</i> Ellis, 1913																																		
		<i>Lasioglossum vierecki</i> (Crawford, 1904)																																		
		<i>Lasioglossum</i> sp. #1 Curtis, 1833																																		
		<i>Sphecodes galerus</i> Lovell & Cockerell, 1907																																		
		<i>Sphecodes ranunculi</i> Robertson, 1897																																		
	Megachilidae	<i>Coelioxys octodentata</i> Say, 1824																																		
		<i>Coelioxys rufitarsis</i> Smith, 1854																																		
		<i>Megachile frigida</i> Smith, 1853																																		
		<i>Megachile latimanus</i> Say, 1823																																		
		<i>Megachile melanophaea</i> Smith, 1853																																		
		<i>Megachile relativa</i> Cresson, 1878																																		
		<i>Osmia bucephala</i> Cresson, 1864																																		
		<i>Osmia similima</i> Smith, 1853																																		
Total interactions per plant			2	2	2	1	6	6	3	1	18	1	9	7	1	3	3	2	5	1	4	4	3	3	11	2	1	4	8	1	15	17				

Appendix 1, continued

Order:	Family:	Name:	<i>Solidago ptarmicoides</i> (Nees) Bov.	<i>Solidago rigida</i> L.	<i>Symphoricarpos</i>	<i>Symphoricarpos occidentalis</i> Hook.	<i>Symphoricarpos ciliolatum</i> (Lindl.) A.&D. Love	<i>Symphoricarpos ericoides</i> (L.) Nesom	<i>Symphoricarpos laevis</i> (L.) A.&D. Love	<i>Vicia americana</i> Muhl. ex Willd.	<i>Zizia aptera</i> (Gray) Fern.	<i>Zizia aurea</i> (L.) Koch	<i>Zizadenus elegans</i> Pursh	Total interactions per insect
Diptera	Syrphidae	<i>Eristalis tenax</i> (L., 1758)	T ²											5
Hymenoptera	Andrenidae	<i>Andrena alleghaniensis</i> Viereck, 1907										B ⁵		2
		<i>Andrena asteris</i> Robertson	L ² T ²	L ²	T ²	O	L ²							8
		<i>Andrena krigiana</i> ? Robertson, 1901							B ⁵			B ⁵		2
		<i>Andrena scutellinitens</i> ? Viereck, 1917												1
		<i>Andrena</i> sp. #1 Fabricius, 1775	L ¹ T ¹	L ¹	T ¹							O		8
		<i>Andrena</i> sp. #2 Fabricius, 1775												1
		<i>Pedita swenki</i> Crawford, 1915	B ⁴											2
		<i>Pseudopanurgus nebrascensis</i> Crawford, 1903												3
	Apidae	<i>Apis mellifera</i> L., 1758					O					O		9
		<i>Bombus bifarius</i> Cresson, 1878				B ³	B ³	B ³						5
		<i>Bombus borealis</i> Kirby, 1837	T ²						B ⁵					8
		<i>Bombus fervidus</i> (Fabricius, 1798)	L ²	O										7
		<i>Bombus perplexus</i> Cresson, 1863	L*		L*									7
		<i>Bombus rufocinctus</i> Cresson, 1863	L ² T ²				L ²		B ⁵			B ⁵		7
		<i>Bombus ternarius</i> Say, 1863	L*	T ¹ L ¹	L ² T ¹	L ¹ T ¹	L ¹	T ²						19
		<i>Bombus vagans</i> Say, 1837	T ¹	O				O	O	B ⁵				16
		<i>Epeolus</i> sp. Latreille, 1802	L ¹											3
		<i>Nomada</i> sp. Scopoli, 1770										O		2
		<i>Melissoides rustica</i> (Say, 1823)	O			O	O	B ³						7
	Colletidae	<i>Hylaeus affinis</i> Smith, 1853	O			O				B ⁵		O		9
		<i>Hylaeus</i> sp. Fabricius, 1775												1
	Halictidae	<i>Agapostemon texanus texanus</i> Cresson, 1872	T ¹		T ¹		B ³	B ³				T ¹		12
		<i>Lasioglossum anomalum</i> (Robertson, 1892)				O								3
		<i>Lasioglossum coriaceum</i> (Smith, 1853)	O				O	B ³				O		8
		<i>Lasioglossum fuscipenne</i> (Smith, 1853)								T ¹				2
		<i>Lasioglossum leucocomum</i> Lovell, 1908												6
		<i>Lasioglossum leucozonium</i> (Schrank, 1781)						B ³						4
		<i>Lasioglossum pruinosum</i> (Robertson, 1892)	T ²	L ¹ T ²		L ¹	L ¹	B ³	B ³	T*	T ²			20
		<i>Lasioglossum succinipenne</i> Ellis, 1913												5
		<i>Lasioglossum vierecki</i> (Crawford, 1904)										O		4
		<i>Lasioglossum</i> sp. #1 Curtis, 1833							B ³					2
		<i>Sphecodes galerus</i> Lovell & Cockerell, 1907												1
		<i>Sphecodes ranunculi</i> Robertson, 1897							B ⁵			B ⁵		2
	Megachilidae	<i>Coelioxys octodentata</i> Say, 1824						O						4
		<i>Coelioxys rufitarsis</i> Smith, 1854							B ³					5
		<i>Megachile frigida</i> Smith, 1853												1
		<i>Megachile latimanus</i> Say, 1823	O			O		B ³						11
		<i>Megachile melanophaea</i> Smith, 1853							B ⁵					5
		<i>Megachile relativa</i> Cresson, 1878	O					O						4
		<i>Osmia bucephala</i> Cresson, 1864												2
		<i>Osmia simillima</i> Smith, 1853							B ⁵					1
Total interactions per plant			3	17	6	5	8	11	11	7	3	11	1	

Key

- L Living Prairie Museum
- T Tall Grass Prairie Preserve
- B Birds Hill Provincial Park
- O Other observations noted in scientific literature (Hilty 2002, Colla and Dumesh)
- 1 2004
- 2 2005
- 3 2008
- 4 2010
- 5 2011
- * 2004 and 2005
- ~ 2004, 2005 and 2008