

**Supplementary Table 1.** Vascular plant species encountered in study sites. Latin name, common name and family are obtained from Saskatchewan Conservation Data Centre (2017); a seven-letter epithet is used to refer to the species during the survey period and in Supplementary Table 2.

Scientific name	Family	Epithet	Common name	G rank	S rank
<i>Achillea millefolium</i> Ledeb.	Asteraceae	Achi mil	common yarrow	S5	G5
<i>Agropyron cristatum</i> (L.) P.Beauv.	Poaceae	Agro cri	crested wheatgrass	G5TRN	SNA
<i>Agrostis scabra</i> Tuck.	Poaceae	Agro sca	hair grass	G5T5	S4
<i>Ambrosia psilostachya</i> DC.	Asteraceae	Ambr cor	perennial ragweed	G5	SNA
<i>Amelanchier alnifolia</i> (Nutt.) Nutt. Ex M.Roem	Rosaceae	Amel aln	Saskatoon	G5T5	S5
<i>Andropogon gerardi</i> Vitman	Poaceae	Andr ger	big bluestem	G5	S4
<i>Anemone cylindrica</i> A.Gray	Ranunculaceae	Anem cyl	long-fruited anemone	G5	S4
<i>Anemone patens</i> Hoppe	Ranunculaceae	Anem pat	prairie crocus	G5T5	S5
<i>Antennaria parvifolia</i> Nutt.	Asteraceae	Ante par	small-leaved everlasting	G5	S4
<i>Artemisia absinthium</i> L.	Asteraceae	Arte abs	absinthe	GNR	SNA
<i>Artemisia cana</i> Pursh	Asteraceae	Arte can	hoary sagebrush	G5T5	S5
<i>Artemisia frigida</i> Willd.	Asteraceae	Arte fri	pasture sage	G5	S5
<i>Artemisia ludoviciana</i> Besser.	Asteraceae	Arte lud	prairie sage	G5T5	S5
<i>Asclepias ovalifolia</i> Decne.	Asclepiadaceae	Ascl ova	oval-leaved milkweed	G5	S5
<i>Asclepias speciosa</i> Torr.	Asclepiadaceae	Ascl spe	common milkweed	G5	S4
<i>Astragalus agrestis</i> Douglas ex G. Don	Fabaceae	Astr agr	field milk-vetch	G5	S4
<i>Astragalus bisulcatus</i> A.Gray	Fabaceae	Astr bis	two-grooved milk-vetch	G5T5	S4
<i>Astragalus crassicaarpus</i> Nutt.	Fabaceae	Astr cra	ground plum	G5T5	S4
<i>Astragalus species</i>	Fabaceae	Astr spp	milk-vetch species		
<i>Avenula hookeri</i> (Scribn.) Holub	Poaceae	Aven hoo	Hooker's oat grass	G5	S5
<i>Bouteloua curtipendula</i> (Michx.) Torr. In Marcy	Poaceae	Bout cur	side-oat grama	G5T5	S3
<i>Bouteloua gracilis</i> (Kunth) Lag. ex Griffiths	Poaceae	Bout gra	blue grama	G5	S5
<i>Brassica rapa</i> L.	Brassicaceae	Bras rap	field mustard	GNRTNR	SNA
<i>Bromus inermis</i> Steven	Poaceae	Brom ine	smooth brome	G5	SNA

(Continued on next page)

Supplementary Table 1: Continued.

Scientific name	Family	Epithet	Common name	G rank	S rank
<i>Campanula rotundifolia</i> Boiss.	Campanulaceae	Camp rot	harebell	G5	S5
<i>Carex species</i>	Cyperaceae	Care spp	sedge species		
<i>Cerastium nutans</i> Raf.	Caryophyllaceae	Cera nut	long-stalked chickweed	G5T5	S4
<i>Cirsium arvense</i> (L.) Scop.	Asteraceae	Cirs arv	Canada thistle	GNR	SNA
<i>Cirsium undulatum</i> Spreng.	Asteraceae	Cirs und	wavy-leaved thistle	G5T5	S4
<i>Comandra umbellata</i> (L.) Nutt.	Santalaceae	Coma umb	bastard toadflax	G5T5	S5
<i>Cornus sericea</i> L.	Cornaceae	Corn ser	red-osier dogwood	G5T5	S4
<i>Dalea purpurea</i> Vent.	Fabaceae	Dale pur	hairy prairie-clover	G5T5	S4
<i>Echinacea angustifolia</i> DC.	Asteraceae	Echi ang	narrow-leaved purple coneflower	G4T4	S3
<i>Elaeagnus commutata</i> Bernh. ex Rydb.	Elaeagnaceae	Elae com	silverberry	G5	S4
<i>Elymus lanceolatus</i> (Scribn. & J.G.Sm.) Gould	Poaceae	Elym lan	northern wheatgrass	G5T5	S5
<i>Elymus repens</i> (L.) Gould	Poaceae	Elym rep	creeping wild rye	GNR	SNA
<i>Elymus trachycaulus</i> (Link) Hoover	Poaceae	Elym tra	slender wheatgrass	G5T5	S5
<i>Erigeron acris</i> C.B.Clarke	Asteraceae	Erig acr	bitter fleabane	G5T5	S4
<i>Erigeron caespitosus</i> Nutt.	Asteraceae	Erig cae	tufted fleabane	G5	S4
<i>Erigeron glabellus</i> Nutt.	Asteraceae	Erig gla	streamside fleabane	G5T5	S5
<i>Erigeron philadelphicus</i> Willd.	Asteraceae	Erig phi	Philadelphia fleabane	G5T5	S4
<i>Escobaria vivipara</i> (Nutt.) Buxb.	Cactaceae	Esco viv	pincushion cactus	G5T5	S4
<i>Equisetum arvense</i> L.	Equisetaceae	Equi arv	common horsetail	G5	S5
<i>Euphorbia esula</i> Kotschy ex Boiss.	Euphorbiaceae	Euph esu	leafy spurge	GNRTNR	SNA
<i>Fragaria virginiana</i> Mill.	Rosaceae	Frag vir	smooth wild strawberry	G5T5	S5
<i>Gaillardia aristata</i> Pursh	Asteraceae	Gail ari	great-flowered gaillardia	G5	S4
<i>Galium boreale</i> Lapeyr. ex DC.	Rubiaceae	Gali bor	northern bedstraw	G5	S5
<i>Gaura coccinea</i> Nutt.	Onagraceae	Gaur coc	scarlet gaura	G5	S4
<i>Geum triflorum</i> Torr.	Rosaceae	Geum tri	three-flowered avens	G5T5	S5
<i>Glycyrrhiza lepidota</i> Nutt.	Fabaceae	Glyc lep	wild licorice	G5	S4
<i>Grindelia squarrosa</i> (Pursh) Dunal	Asteraceae	Grin squ	gumweed	G5	S5

(Continued on next page)

Supplementary Table 1: Continued.

Scientific name	Family	Epithet	Common name	G rank	S rank
<i>Gutierrezia sarothrae</i> Kuntze	Asteraceae	Guti sar	broomweed	G5	S4
<i>Helianthus annuus</i> L.	Asteraceae	Heli ann	common annual sunflower	G5	S4
<i>Hesperostipa comata</i> (Trin. & Rupr.) Barkworth	Poaceae	Hesp com	needle-and-thread grass	G5T5	S5
<i>Heterotheca villosa</i> (Pursh) Shinnery	Asteraceae	Hete vil	hairy false golden-aster	G5T5	S5
Scientific name	Family	Epithet	Common name	G rank	S rank
<i>Heuchera richardsonii</i> R.Br.	Saxifragaceae	Heuc ric	alumroot	G5	S4
<i>Hordeum jubatum</i> DC.	Poaceae	Hord jub	fox-tail barley	G5T5	S5
<i>Juncus balticus</i> Willd.	Juncaceae	Junc bal	3altic rush	G5	S4
<i>Juniperus horizontalis</i> Moench	Cupressaceae	Juni hor	creeping juniper	G5	S5
<i>Koeleria macrantha</i> (Ledeb.) Schult.	Poaceae	Koel mac	June grass	G5	S5
<i>Liatris ligulistylis</i> (A.Nelson) Rydb.	Asteraceae	Liat lig	meadow blazing-star	G5	S4
<i>Liatris punctata</i> Hook.	Asteraceae	Liat pun	dotted blazing star	G5T5	S5
<i>Lilium philadelphicum</i> Thunb.	Liliaceae	Lili phi	western red lily	G5T4T5	S4
<i>Linum lewisii</i> Pursh	Linaceae	Linu lew	flax	G5T5	S4
<i>Linum rigidum</i> Sarato ex Parl.	Linaceae	Linu rig	large-flower yellow flax	G5T5	S5
<i>Lithospermum canescens</i> (Michx.) Lehm.	Boraginaceae	Lith can	hoary puccoon	G5	S4
<i>Lycopodium species</i>	Lycopodiaceae	Lyco spp	club-moss species		
<i>Lygodesmia juncea</i> D.Don ex Hooker.	Asteraceae	Lygo jun	skeleton-weed	G5	S5
<i>Lysimachia maritima</i> (L.) Galasso, Banfi & Soldano	Primulaceae	Lysi mar	sea-milkwort	G5	S4
<i>Medicago lupulina</i> L.	Fabaceae	Medi lup	black medic	GNR	SNA
<i>Medicago sativa</i> Urb.	Fabaceae	Medi sat	alfalfa	GNRTNR	SNA
<i>Melilotus albus</i> Desr.	Fabaceae	Meli alb	white sweet-clover	G5	SNA
<i>Melilotus officinalis</i> (L.) Lam.	Fabaceae	Meli off	yellow sweet-clover	GNR	SNA
<i>Monarda fistulosa</i> Hook.	Lamiaceae	Mona fis	wild bergamont	G5T5	S4
<i>Mulgedium pulchellum</i> G.Don	Asteraceae	Mulg pul	common blue lettuce	G5T5	S4
<i>Nassella viridula</i> (Trin.) Barkworth	Poaceae	Nass vir	green needlegrass	G5	S5

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Supplementary Table 1: Continued.

Scientific name	Family	Epithet	Common name	G rank	S rank
<i>Oenothera biennis</i> Walter	Onagraceae	Oeno bie	yellow evening primrose	G5	S4
<i>Orthocarpus luteus</i> Nutt.	Scrophulariaceae	Orth lut	Owl's-clover	G5	S4
<i>Oxytropis lambertii</i> Pursh	Fabaceae	Oxyt lam	stemless point-vetch	G5TNR	S3
<i>Oxytropis species</i>	Fabaceae	Oxyt spp	locoweed species		
<i>Pascopyrum smithii</i> Barkworth & D.R.Dewey	Poaceae	Pasc smi	western wheatgrass	G5	S5
<i>Pedimelum argophyllum</i> (Pursh) J.W.Grimes	Fabaceae	Pedi arg	silvery scurf pea	G5	S5
<i>Penstemon gracilis</i> Nutt.	Scrophulariaceae	Pens gra	lilac beardtongue	G5T4T5	S4
<i>Poa palustris</i> L.	Poaceae	Poa pal	fowl blue grass	G5	S4
<i>Poa pratensis</i> Pollich	Poaceae	Poa pra	Kentucky blue grass	G5	SNA
<i>Polygala alba</i> Nutt.	Polygalaceae	Poly alb	white milkwort	G5	S3
<i>Polygala senega</i> L.	Polygalaceae	Poly sen	seneca snakeroot	G4G5	S4
<i>Potentilla species</i>	Rosaceae	Pote spp	cinquefoil species		
<i>Potentilla norvegica</i> Schur	Rosaceae	Pote nor	rough cinquefoil	G5	S4
<i>Prunus virginiana</i> Du Roi	Rosaceae	Prun vir	chokecherry	G5T5	S5
<i>Ratibida columnifera</i> (Nutt.) Wooton & Standl.	Asteraceae	Rati col	prairie cone-flower	G5	S4
<i>Rosa arkansana</i> Porter	Rosaceae	Rosa ark	low prairie rose	G5	S5
<i>Rumex crispus</i> Cham. & Schltl.	Polygonaceae	Rume cri	curled dock	GNR	SNA
<i>Rumex species</i>	Polygonaceae	Rume spp	dock species		
<i>Schizachyrium scoparium</i> (Michx.) Nash	Poaceae	Schi sco	little bluestem	G5T5	S4
<i>Solidago missouriensis</i> Nutt.	Asteraceae	Soli mis	low goldenrod	G5T5	S5
<i>Solidago mollis</i> Bartl.	Asteraceae	Soli mol	velvet goldenrod	G5T5	S4
<i>Solidago rigida</i> L.	Asteraceae	Soil rig	stiff goldenrod	G5T5	S4
<i>Sonchus arvensis</i> L.	Asteraceae	Sonc arv	field sow-thistle	GNRTNR	SNA
<i>Sphaeralcea coccinea</i> (Nutt.) Rydb.	Malvaceae	Spha coc	scarlet mallow	G5T5	S5
<i>Spiraea alba</i> Du Roi	Rosaceae	Spir alb	narrow-leaved meadow-sweet	G5T5	S4
<i>Symphoricarpos occidentalis</i> Hook	Caprifoliaceae	Symp occ	western snowberry	G5	S5

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Supplementary Table 1: Continued

Scientific name	Family	Epithet	Common name	G rank	S rank
<i>Symphyotrichum ericoides</i> (L.) G.L.Nesom	Asteraceae	Symp eri	tufted white prairie aster	G5T5	S5
<i>Symphyotrichum falcatum</i> (Lindl.) G.L.Nesom	Asteraceae	Symp fal	white prairie aster	G5T4T5	S4
<i>Taraxacum officinale</i> F.H.Wigg	Asteraceae	Tara off	common dandelion	G5T5	SNA
<i>Thalictrum venulosum</i> Trel.	Ranunculaceae	Thal ven	veiny meadow-rue	G5	S4
<i>Thermopsis rhombifolia</i> (Nutt. ex Pursh) Richardson	Fabaceae	Ther rho	golden-bean	G5	S5
<i>Tragopogon dubius</i> Scop.	Asteraceae	Trag dub	yellow goat's-beard	GNR	SNA
<i>Trifolium hybridum</i> E.H.L.Krause	Fabaceae	Trif hyb	alsike clover	GNR	SNA
<i>Vicia americana</i> Muhl. ex Willd.	Fabaceae	Vici ame	American purple vetch	G5T5	S5
<i>Zizia aptera</i> (A.Gray) Fernald	Apiaceae	Zizi apt	heart-leaved Alexander's	G5	S4

**Supplementary Table 2A.** All plant species within the six vegetation quadrats averaged at the site level for study sites 1 to 23. Values are per cent foliar cover. See Supplementary Table 1 for definitions of the seven-letter epithets in column 1.

Species	1*	2	3	4	5	6*	7	8	9	10*	11	12	13	14	15	16	17*	18	19	20	21	22	23
Achi mil	0.33	2.50			0.33		2.33	3.33		1.17			0.33	0.83	1.83		1.33			4.17	1.33	1.67	
Agro cri																					8.33		
Agro sca																							
Ambr cor			5.83										2.50		0.33					1.67			
Amel aln				1.17																			
Andr ger																							
Anem cyl							0.67				0.33					0.67					0.50		
Anem pat		3.17	2.00	0.83	8.33	0.67	0.83	4.50	4.00	3.33	1.50	0.83		1.33		3.17	0.50	1.00				4.00	5.00
Ante par	3.00								3.33	2.33				3.33	2.00				0.83			1.67	
Arte abs									1.17					8.33			0.33		0.83				
Arte can																					0.83	0.83	
Arte fri	0.83	5.83	0.33	3.67	2.83		1.50	1.67	1.83	5.00	2.33	1.67	0.33	4.17	1.17	0.17	3.00	1.17	5.17	3.00	2.83	2.33	2.50
Arte lud		3.00	3.33	4.17	3.33	1.67	2.00	9.17	2.50	0.83	4.17	2.50	1.33				2.33	5.83		2.83		1.33	
Ascl ova																							
Ascl spe									0.83		0.33	0.83			1.33								
Astr agr	10.00			0.33	3.67				0.33					4.17	3.67	2.50		1.67	0.33	1.17	3.00	6.00	
Astr bis	0.83	3.50																					
Astr cra																	0.33		1.17				
Astr spp		4.00	0.83													0.33						1.33	3.00
Aven hoo		18.33									1.67												
Bout cur																							
Bout gra		0.83									0.83								1.67				
Bras rap									0.33														
Brom ine	11.67	11.67	5.33			3.33	6.67			5.83		4.17	28.33			20.00	30.00		5.00	12.50	3.33		1.67
Camp rot		0.67			0.33		0.33										0.67		0.33				1.33
Care spp																							
Cera nut						0.33																	
Cirs arv	0.83					0.33																	
Cirs und							1.17			2.00	3.17	0.33				0.33		0.67	0.67				5.00
Coma umb		8.67		2.83	2.83		2.83	2.50	2.33		2.00	0.33		0.33	2.00	2.33	5.00	1.33	3.33	0.83	2.83	0.33	1.17
Corn ser				11.67		4.17																	
Dale pur		1.33		0.83	2.50	0.83	1.67		5.67		1.50	0.33		1.17	0.17	4.50		1.17	0.83	0.83	3.00		0.50
Echi ang	0.50	2.00		2.33	3.17	3.33	0.33	0.83	2.50	0.67	1.17	0.50		1.50	0.33			4.33		0.33	3.00	0.83	3.83
Elae com			7.83		0.83	1.67	7.50	5.83								0.33			0.83	4.17			6.17
Elym lan																							
Elym rep						4.17	0.83																
Elym tra		3.33	17.50	12.50	9.17		1.17		3.33			11.67		21.33	19.67	14.17	7.50	2.17					
Erig acr											2.00												
Erig cae		0.33																					
Erig gla															5.67								
Esco viv														0.83					0.83				
Equi arv																							

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Supplementary Table 2A: Continued.

Species	1*	2	3	4	5	6*	7	8	9	10*	11	12	13	14	15	16	17*	18	19	20	21	22	23
Euph esu																							
Frag vir										0.33													
Gail ari		1.17			0.33										1.67								
Gali bor	0.50		1.67	0.83	1.67	2.83	4.00	5.00		0.83	1.33	3.33			0.83	5.00	1.67						
Gaur coc	0.33		1.33	3.17	4.17	1.00		0.33	0.33		0.33	1.00	0.83	2.00	1.50		2.00	2.50	3.50	5.33	1.33	1.67	3.67
Geum tri					1.17		0.67																
Glyc lep			1.67	0.83		5.83	1.67				0.83		9.17				1.67				4.67		
Grin squ									0.33					0.33							1.67		
Guti sar																							
Heli ann				1.67		1.67	3.83		12.17	1.33	4.67	4.17				5.50	3.00	5.00		1.33			1.33
Hesp com	16.67	9.17	5.00	22.50	19.17	1.67	22.50	18.33	23.33	13.33	15.00	15.00		30.83	4.17	7.50	4.17	12.50	10.83	1.67	12.50	16.67	24.17
Hete vil									1.33								5.00						
Heuc ric								0.83															
Hord jub																							
Juni hor									2.50						0.83	10.33							
Koel mac		23.33	8.33	7.50	8.33		5.83		13.33	2.50		1.67			5.83		1.67	2.50	6.67		9.17	5.00	
Liat lig												0.33					0.33	0.50					1.33
Liat pun				0.33	1.67		1.17	2.50	0.33	0.33				0.83									
Lili phi																0.33							
Linu lew				0.33	1.17		0.67		0.83	0.50		1.17			0.17	0.83							2.33
Linu rig															0.33						0.33	0.33	
Lith can			0.83																				
Lyco spp		4.17								0.83					0.83								
Lygo jun																							
Lysi mar						0.33									1.67	0.33							
Medi lup		0.33																		0.33	4.67	1.33	
Medi sat	0.33			1.33		11.67	26.17		5.00					0.83		0.33						1.17	
Meli alb																							
Meli off																							
Mona fis			0.83																				9.50
Mulg pul	0.33	5.00	2.00	0.33	1.17				0.83		2.00	1.33	1.17				0.33	1.33					0.33
Nass vir	0.17			5.00	0.83							2.50									18.33		15.00
Oeno bie						0.33			1.67														
Orth lut																							
Oxyt lam											0.33				1.67		0.33		0.33				
Oxyt spp					0.83										0.83								
Pasc smi										25.00	11.67		1.67		6.67	1.67			18.33	5.00	16.67		10.00
Pedi arg	0.50	0.33	1.67	1.17	0.33	2.50	4.33	2.83	0.83	3.33	3.33	1.17	5.00	0.83	1.17	0.50	3.50	0.83	1.67	0.83	1.00	2.67	1.17
Pens gra		3.67																					
Poa pal															4.17								
Poa pra	70.83	13.33	60.00	30.83	25.00	50.00	25.00	45.00	15.00	42.50	48.33	40.00	59.17	23.33	51.67	34.17	58.33	70.83	20.83	56.67	30.83	61.67	28.33
Poly alb															0.50	0.67	0.33				3.83	3.00	
Poly sen									5.00														

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Supplementary Table 2A: Continued.

Species	1*	2	3	4	5	6*	7	8	9	10*	11	12	13	14	15	16	17*	18	19	20	21	22	23
Pote spp	0.33																						
Pote nor								0.83	0.33	1.17	0.33	0.83		3.50	0.83					0.83	0.83		
Prun vir								0.33				1.67											
Rati col			0.83		0.83	0.33	0.33		2.67	5.00	1.33			3.83	5.50	0.17		0.83	5.83	2.50	2.17	4.00	0.33
Rosa ark		1.67	2.50	0.67	5.83	0.83		0.83			2.17	1.50	3.33	2.50		0.67	0.50	0.83	6.33	5.17	0.33	1.83	
Rume cri																							
Rume spp																							
Schi sco					5.00	20.83	3.33		15.83	5.00	5.00	4.17			2.50	17.50		3.33					
Soli mis						0.83														4.67			1.67
Soli mol					0.33	0.83	0.33	0.83				1.67					0.33	5.83	2.50	1.17	0.33	3.83	0.83
Soil rig	0.50															1.67							
Sonc arv																							
Spha coc																						0.83	0.83
Spir alb											0.83			0.83									
Symp occ	0.83	1.33	4.17	5.00	5.00	4.17	5.00	4.17		2.50	11.17	25.00	15.00	0.33	0.83		0.83	3.33	13.33	3.33	1.33	1.67	7.83
Symp eri													0.83										
Symp fal	0.83																						
Tara off	1.83	1.50		0.33			0.33								0.67					2.00	1.17	0.67	0.50
Thal ven												1.67					0.83						
Ther rho								14.67		0.33		1.33		0.33						0.83			6.67
Trag dub						0.33		0.83										0.33				0.50	
Trif hyb																							
Vici ame		0.83						3.67		3.33	1.67	0.67		1.17	2.50	0.33	0.33	0.33	1.17				
Zizi apt																							
Ground	4.83		2.50	0.83	4.17	0.83			3.33					15.83	0.83					9.17		0.83	0.83
Rock		1.67					3.33				0.83			1.67						1.17			
Feces										1.67				3.33						1.67	0.83		

\* Indicates positive (present) Dakota skipper site.



**Supplementary Table 2B.** All plant species within the six vegetation quadrats averaged at the site level for study sites 24 to 46. Values are per cent foliar cover. See Supplementary Table 1 for definitions of the seven-letter epithets in column 1.

Species	24	25	26	27	28*	29	30	31	32	33	34*	35	36	37	38*	39	40	41	42	43*	44	45	46*	
Achi mil	1.83	0.83	0.33			2.67	0.83	2.17	2.83			1.67		1.17	0.83	2.17	3.00		1.83			1.00	1.33	
Agro cri		6.67				3.00												15.00						
Agro sca	6.33		1.33																					
Ambr cor						0.83																		
Amel aln		0.83																						
Andr ger																		8.33					2.50	
Anem cyl									1.50		0.33	0.33	1.83	0.33	1.83	0.83		1.17			1.67	2.17	0.83	
Anem pat	1.17	0.83			1.67		0.83			0.33	2.00			1.67				0.83			0.83			
Ante par	1.33					6.33			1.17				0.83		1.33								0.83	
Arte abs																	1.33							
Arte can						3.83																		
Arte fri	0.83	0.83	1.33		0.50	7.00	0.83	1.67	0.83	2.33	1.33	2.17	1.83	1.67	2.17			2.83	3.33	2.50	5.83		1.67	
Arte lud	3.67	5.33	3.83			6.67	7.00	1.67	4.67	0.50	0.33	3.83	2.67	0.83	4.83	3.33	6.17	5.00	5.50		3.33	2.17	12.17	
Ascl ova			0.50				0.83																	
Ascl spe										1.33		1.67			0.83			0.67	2.17				0.33	
Astr agr		0.33	1.67		2.83																			
Astr bis																								
Astr cra												0.83												
Astr spp							0.83																	
Aven hoo	1.67		1.67									5.83	10.83	12.00		7.50		4.17	12.50	10.00			1.67	
Bout cur																							2.50	
Bout gra					2.00																6.67			
Bras rap																								
Brom ine						16.67	32.50	15.83	9.17	5.83	10.00	16.67					23.33	3.33		15.00	11.67			
Camp rot			1.83				1.33									0.83		0.67	0.83				0.83	
Care spp			1.67					3.33																
Cera nut												1.67												
Cirs arv			2.50	0.83				0.33					0.50					0.67	0.33		0.83			
Cirs und	0.83	2.17	0.83				2.50	1.67	1.17			1.67	0.67	2.00	1.17	1.83	2.50	1.33	4.17		0.50	1.00	4.00	
Coma umb	2.50	0.50			0.83		0.50		0.83	1.67	1.33			1.67		0.83				3.33		1.33	0.50	
Corn ser																								
Dale pur	0.50	1.33	0.50		4.67			0.33		0.50	1.17	0.50	0.33	1.83	0.83	1.00		0.50	1.00	2.00		1.33	0.83	
Echi ang					1.83		2.00		0.83	0.83	0.50			2.33		0.83	0.50	0.50	3.00	3.83		2.83		
Elae com		2.17	2.17				5.50			4.17	5.00				3.83			1.67				9.67	5.50	5.00
Elym lan												22.50		5.00	5.83	1.67	1.67			9.17	5.83	2.50	4.17	5.00
Elym rep	5.00																							
Elym tra		5.83		53.33	14.67		5.00			1.67	3.33						5.00	3.33	4.17				2.50	
Erig acr																								
Erig cae																								
Erig gla																					0.83			
Erig phi					0.50																			
Esco viv																								

(Continued on next page)

Supplementary Table 2B: Continued

Species	24	25	26	27	28*	29	30	31	32	33	34*	35	36	37	38*	39	40	41	42	43*	44	45	46*	
Equi arv																								
Euph esu																1.33								
Frag vir							0.83																	
Gail ari	0.83								0.83				1.67	0.83										
Gali bor	0.50	0.67	1.17		1.33		3.33		3.33			1.50	2.50	3.67		0.83		3.33	1.50			2.50	1.33	0.83
Gaur coc	1.67	1.67	0.83	0.83	1.83	0.33	3.00	2.17		0.67				0.50	2.17			0.83	0.33	3.33	2.17		1.17	
Geum tri												1.00		1.00										
Glyc lep		1.33	4.17			3.00	1.33		3.33	1.33	1.67	0.83	0.50		3.33					3.83		4.17	5.83	0.83
Grin squ	1.17					0.33		1.67																
Guti sar					0.50																			
Heli ann		3.00	0.83		2.17		2.17		2.83	4.17	1.33	6.33	4.33	3.00	2.50	4.17	2.17	4.17	0.83			1.33	0.50	4.33
Hesp com	1.33	17.50	1.67		23.17		1.67		16.67	30.00	13.33		5.00	25.00	11.67	15.00		7.50		22.50	10.00	5.83	7.50	
Hete vil				0.33		13.33		1.33		1.33			1.33		0.83	1.33		1.67			0.83		0.50	
Heuc ric									0.33															
Hord jub		0.83	5.00	19.33				6.67																
Juni hor					6.67														2.50					
Koel mac	1.67				10.00	1.67												3.33		2.50			1.67	
Liat lig							0.83										0.50	1.50						
Liat pun				0.33					1.33		0.83									0.50	1.67			
Lili phi																								
Linu lew					1.17					2.00	0.50				0.83			1.67		0.50			1.00	
Linu rig					0.83																			
Lith can																								
Lycos spp						5.00																		
Lygo jun										0.33				0.33	0.50						1.33			
Lysi mar										0.33														
Medi lup						0.50		3.33	1.67								11.33							
Medi sat					0.50			0.83									2.50	7.50	0.83	4.17				
Meli alb				5.00	0.33	0.33	0.50						1.00				0.83							
Meli off		0.33		0.83				0.83						0.33				0.67		5.00			0.67	
Mona fis		2.50					3.33			2.67												3.83	2.50	3.33
Mulg pul		1.33	0.67	3.83			1.83	2.50		0.33		0.83	1.50	1.00		0.50		0.33	0.83	5.83			1.83	
Nass vir	1.33		1.67	5.00	1.67				5.00	5.83	7.00		17.50	3.33	13.33									5.00
Oeno bie					0.83			0.33		2.00									1.33					
Orth lut					0.83																			
Oxyt lam												1.17	1.17	2.50							0.83			
Oxyt spp	2.50										0.83													
Pasc smi	5.00	6.33	10.83	7.50	4.17			20.00																1.67
Pedi arg	3.83	0.83			1.17	0.83	2.50		2.67	0.33	2.33	3.33	2.83	2.33	7.50	0.83	3.33	5.33	6.33	4.17		0.50	3.83	
Pens gra									0.50															
Poa pal				8.33																				
Poa pra	58.33	57.50	65.00	5.00	18.33	39.17	34.17	50.83	50.00	26.67	41.67	40.00	37.50	20.83	30.00	46.67	41.67	29.17	40.83	10.00	40.00	42.83	45.00	
Poly alb					0.33																			
Poly sen																								

(Continued on next page)

Supplementary Table 2B: Continued

Species	24	25	26	27	28*	29	30	31	32	33	34*	35	36	37	38*	39	40	41	42	43*	44	45	46*
Pote spp																							
Pote nor		0.33		0.33		0.33	1.83	0.83															1.00
Prun vir																							
Rati col	4.17				2.17	0.83	3.33	1.33		0.50	0.83	1.83	1.67		1.67	1.33		0.67	2.50				
Rosa ark	3.00	0.83	0.33		1.67	1.33		5.00			2.00	3.17	2.17	2.17		2.50	1.33		2.50		0.83	0.83	0.83
Rume cri				0.83																			
Rume spp		1.17																					
Schi sco					9.17		1.67			7.50	3.00	2.50		6.67	4.17	11.67		3.33		15.83		5.83	2.50
Soli mis										0.50				0.50	2.50						0.83	1.33	
Soli mol	7.50					6.50	2.50										0.50						
Soil rig						0.33	5.00		0.33	0.33	0.67	2.33	1.17	2.50	1.33		3.50				1.67		0.50
Sonc arv												0.50	2.50									0.83	0.50
Spha coc																							
Spir alb													0.83										
Symp occ	3.67	7.50	8.67		2.50		8.00		8.83	12.50	9.17	2.83	13.00	4.17	8.83	5.50	3.83		12.50		16.67	13.83	8.67
Symp eri							0.83																
Symp fal																							
Tara off	1.67	0.33		0.83				1.17	0.50				1.67		0.33		3.17	0.50					
Thal ven							0.83															0.33	
Ther rho	2.50		2.50			0.83	0.83		0.33		5.00								0.50				
Trag dub	0.33	0.50										1.00				0.67	0.50		0.50	1.50		1.33	0.33
Trif hyb				0.83				0.83															
Vici ame		0.33							2.50	1.17	2.83			1.33		1.33	1.33	0.50	1.67	1.33	0.83	0.83	0.33
Zizi apt												0.33	0.33	0.33	0.83								1.33
Ground				19.17	15.33	9.17		10.00	10.83	11.00	9.17	13.83	15.00	16.67	16.67	12.17	8.00	9.17	12.50	15.00	10.00	17.50	14.17
Rock	5.50	3.33	0.83	4.17	1.67	3.33			1.67					5.00		5.00	1.67	2.50				4.17	
Feces	2.50		0.83						3.67		1.83				3.00	2.50	1.67	0.83	3.33		0.83		0.83

\* Indicates positive (present) Dakota skipper site.