

**Supplementary material**

Appendix 1. Ranking of generalized linear models explaining variation in Sprague's pipit daily nest survival rates as a function of habitat (native and planted grassland), nest age (age), date and year. Year is considered the null model.  $K$  represents the number of parameters included in the model,  $\Delta AIC_c$  is the scaled Akaike Information Criterion adjusted for small sample size and  $W_i$  represents the weight of evidence the model is the best of those considered. All polynomial and interaction terms include the constituent main effects and lower degree terms.

Model	$K$	$AIC_c$	$\Delta AIC$	$W_i$
habitat $\times$ age <sup>2</sup> , habitat $\times$ date, year	12	906.3	0.0	0.65
habitat $\times$ age <sup>2</sup> , habitat $\times$ date, habitat $\times$ year	16	908.0	1.7	0.27
habitat $\times$ date, age <sup>2</sup> , year	10	912.0	5.7	0.04
habitat $\times$ age <sup>2</sup> , date, year	11	913.3	7.0	0.02
habitat $\times$ date, habitat $\times$ year, age <sup>2</sup>	14	915.2	8.9	0.01
habitat $\times$ age <sup>2</sup> , year	11	915.2	8.9	0.01
habitat $\times$ age <sup>2</sup> , habitat $\times$ year	14	917.9	11.6	0.00
age <sup>3</sup> , year	8	918.6	12.3	0.00
habitat $\times$ date, year	8	918.7	12.4	0.00
age <sup>2</sup> , year	7	919.2	12.9	0.00
age <sup>3</sup> , date <sup>2</sup> , year	10	919.3	13.0	0.00
age <sup>2</sup> , date <sup>2</sup> , year	9	919.7	13.4	0.00
habitat $\times$ age <sup>2</sup> , habitat $\times$ year, date	15	919.7	13.4	0.00
habitat $\times$ date, habitat $\times$ year	12	920.1	13.8	0.00
age <sup>3</sup> , date, year	9	920.2	13.9	0.00
age <sup>2</sup> , date, year	8	920.8	14.5	0.00

Habitat, age <sup>2</sup> , year	8	921.2	14.9	0.00
age, year	6	922.5	16.2	0.00
Habitat, age <sup>2</sup> , date, year	9	922.8	16.5	0.00
age×year	10	923.1	16.8	0.00
age, date <sup>2</sup> , year	8	923.4	17.1	0.00
age, date, year	7	924.2	17.9	0.00
habitat×year, age <sup>2</sup>	12	928.1	21.9	0.00
date <sup>2</sup> , year	7	928.4	22.1	0.00
habitat×year, age <sup>2</sup> , date	13	929.9	23.6	0.00
year (null)	5	930.4	24.1	0.00
date, year	6	932.3	26.0	0.00
habitat, year	6	932.4	26.1	0.00
habitat, date, year	7	934.2	27.9	0.00
date×year	10	937.3	31.1	0.00
habitat×year	10	939.1	32.8	0.00
habitat×year, date	11	940.8	34.5	0.00

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Appendix 2. Summary of Sprague’s pipit nest fate, clutch size, and hatching, fledging, and nest success in native and planted grasslands in southcentral Saskatchewan, Canada, 2004–2008.

	Planted (n=76)	Native (n=110)
% Successful	30	35
% Predated	53	42
% Deserted	7	9
% Failed <sup>1</sup>	10	14
% Unsuccessful nests predated	75 (53)	65 (71)
Clutch size ( $z \pm SE$ , n)	4.7 $\pm$ 0.1 (72)	4.5 $\pm$ 0.1 (99)
% eggs hatched (# of eggs laid)	72 (337)	62 (444)
% eggs incubated full term that hatched (# of eggs laid)	88 (278)	79 (347)
Young fledged/nest ( $z \pm SE$ , n)	0.9 $\pm$ 0.2 (76)	1.2 $\pm$ 0.2 (110)
Young fledged/successful nest ( $z \pm SE$ , n)	2.9 $\pm$ 0.2 (24)	3.3 $\pm$ 0.2 (39)
Incubation DSR (85% confidence interval)	0.973 (0.958-0.983)	0.949 (0.935-0.960)

Nestling DSR (85% confidence interval)	0.919 (0.896-0.938)	0.940 (0.924-0.952)
Mayfield Success (% , 85% confidence limits)	25 (15-36)	23 (16-32)

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<sup>1</sup> Failed for reasons other than by nest predation or desertion.

Appendix 3. Apparent clutch size of Sprague's pipit nests in planted grasslands and native pastures in south-central Saskatchewan, 2004–2008.

Year	Apparent clutch size (%)				(z ± SD) eggs
	3 eggs	4 eggs	5 eggs	6 eggs	
2004 (n = 30)	1(3)	24 (80)	5 (17)	0	4.1 ± 0.4
2005 (n = 20)	1 (5)	6 (30)	12 (60)	1 (5)	4.6 ± 0.7
2006 (n = 24)	0	5 (21)	19 (79)	0	4.8 ± 0.4
2007 (n = 52)	1 (2)	9 (17)	41 (79)	1 (2)	4.8 ± 0.5
2008 (n = 45)	3 (7)	15 (33)	27 (60)	0	4.5 ± 0.6
Combined (171)	6 (4)	59 (34)	104 (61)	2 (1)	4.6 ± 0.6