

Supporting Information for:
**Dynamic spatiotemporal modeling of a habitat defining plant
species to support wildlife management at regional scales**

ANDREW T. TREDENNICK, THOMAS PREBYL, ADRIAN P. MONROE, JOHN LOMBARDI, AND CAMERON L. ALDRIDGE

Potential scale reduction factors

Potential scale reduction factors (\hat{R}) help diagnose MCMC convergence. MCMC algorithms have reached convergence when $\hat{R} < 1.1$.

Table 1: BearRiver

	Point est.	Upper C.I.
Beta[1]	1.01	1.03
Beta[2]	1.01	1.03
Beta[3]	1.00	1.00
Beta[4]	1.00	1.00
gamma[1]	1.00	1.00
gamma[2]	1.00	1.00
gamma[3]	1.00	1.01
gamma[4]	1.00	1.00
gamma[5]	1.00	1.01
gamma[6]	1.00	1.00
gamma[7]	1.00	1.01
gamma[8]	1.01	1.01
gamma[9]	1.00	1.00
gamma[10]	1.00	1.00
gamma[11]	1.00	1.00
gamma[12]	1.00	1.00
gamma[13]	1.00	1.01
gamma[14]	1.00	1.01
gamma[15]	1.00	1.00
gamma[16]	1.00	1.00
gamma[17]	1.01	1.01
gamma[18]	1.00	1.00
gamma[19]	1.00	1.00
gamma[20]	1.00	1.00
gamma[21]	1.00	1.00
gamma[22]	1.00	1.00
gamma[23]	1.00	1.00
gamma[24]	1.00	1.00
gamma[25]	1.00	1.00
gamma[26]	1.00	1.00
gamma[27]	1.00	1.00
gamma[28]	1.00	1.00
gamma[29]	1.00	1.00
gamma[30]	1.00	1.00
gamma[31]	1.00	1.00
gamma[32]	1.00	1.00
sigma_y	1.01	1.03
lp__	1.00	1.02

Table 2: BlacksFork

	Point est.	Upper C.I.
Beta[1]	1.00	1.00
Beta[2]	1.00	1.01
Beta[3]	1.01	1.03
Beta[4]	1.02	1.05
gamma[1]	1.01	1.02
gamma[2]	1.00	1.01
gamma[3]	1.00	1.01
gamma[4]	1.01	1.02
gamma[5]	1.01	1.03
gamma[6]	1.01	1.02
gamma[7]	1.01	1.04
gamma[8]	1.01	1.03
gamma[9]	1.01	1.03
gamma[10]	1.01	1.03
gamma[11]	1.02	1.05
gamma[12]	1.00	1.00
gamma[13]	1.01	1.05
gamma[14]	1.01	1.04
gamma[15]	1.01	1.03
gamma[16]	1.01	1.02
gamma[17]	1.01	1.03
gamma[18]	1.00	1.01
gamma[19]	1.00	1.01
gamma[20]	1.00	1.00
gamma[21]	1.00	1.01
gamma[22]	1.01	1.04
gamma[23]	1.02	1.07
gamma[24]	1.01	1.02
gamma[25]	1.01	1.03
gamma[26]	1.01	1.03
gamma[27]	1.01	1.04
gamma[28]	1.01	1.04
gamma[29]	1.00	1.00
gamma[30]	1.01	1.01
gamma[31]	1.00	1.01
gamma[32]	1.01	1.02
sigma_y	1.00	1.01
lp__	1.00	1.00

Table 3: Buffalo

	Point est.	Upper C.I.
Beta[1]	1.01	1.03
Beta[2]	1.01	1.03
Beta[3]	1.01	1.02
Beta[4]	1.00	1.00
gamma[1]	1.00	1.00
gamma[2]	1.00	1.01
gamma[3]	1.00	1.00
gamma[4]	1.01	1.01
gamma[5]	1.00	1.01
gamma[6]	1.00	1.00
gamma[7]	1.00	1.00
gamma[8]	1.00	1.00
gamma[9]	1.00	1.01
gamma[10]	1.01	1.02
gamma[11]	1.00	1.01
gamma[12]	1.00	1.00
gamma[13]	1.00	1.01
gamma[14]	1.00	1.01
gamma[15]	1.00	1.01
gamma[16]	1.00	1.00
gamma[17]	1.00	1.01
gamma[18]	1.00	1.00
gamma[19]	1.00	1.01
gamma[20]	1.00	1.01
gamma[21]	1.01	1.03
gamma[22]	1.01	1.02
gamma[23]	1.00	1.00
gamma[24]	1.01	1.01
gamma[25]	1.00	1.00
gamma[26]	1.00	1.01
gamma[27]	1.00	1.01
gamma[28]	1.00	1.01
gamma[29]	1.00	1.01
gamma[30]	1.00	1.01
gamma[31]	1.00	1.00
gamma[32]	1.00	1.01
sigma_y	1.01	1.01
lp__	1.00	1.02

Table 4: ContinentalDivide

	Point est.	Upper C.I.
Beta[1]	1	1.00
Beta[2]	1	1.00
Beta[3]	1	1.01
Beta[4]	1	1.00
gamma[1]	1	1.01
gamma[2]	1	1.00
gamma[3]	1	1.00
gamma[4]	1	1.01
gamma[5]	1	1.00
gamma[6]	1	1.00
gamma[7]	1	1.01
gamma[8]	1	1.00
gamma[9]	1	1.00
gamma[10]	1	1.01
gamma[11]	1	1.01
gamma[12]	1	1.00
gamma[13]	1	1.00
gamma[14]	1	1.01
gamma[15]	1	1.00
gamma[16]	1	1.00
gamma[17]	1	1.01
gamma[18]	1	1.01
gamma[19]	1	1.00
gamma[20]	1	1.00
gamma[21]	1	1.00
gamma[22]	1	1.01
gamma[23]	1	1.00
gamma[24]	1	1.00
gamma[25]	1	1.00
gamma[26]	1	1.01
gamma[27]	1	1.00
gamma[28]	1	1.00
gamma[29]	1	1.01
gamma[30]	1	1.01
gamma[31]	1	1.00
gamma[32]	1	1.00
sigma_y	1	1.00
lp__	1	1.00

Table 5: Crowheart

	Point est.	Upper C.I.
Beta[1]	1.01	1.03
Beta[2]	1.01	1.03
Beta[3]	1.01	1.01
Beta[4]	1.00	1.00
gamma[1]	1.01	1.01
gamma[2]	1.00	1.00
gamma[3]	1.00	1.00
gamma[4]	1.00	1.01
gamma[5]	1.00	1.00
gamma[6]	1.00	1.00
gamma[7]	1.00	1.00
gamma[8]	1.00	1.01
gamma[9]	1.01	1.02
gamma[10]	1.00	1.01
gamma[11]	1.00	1.01
gamma[12]	1.00	1.00
gamma[13]	1.00	1.00
gamma[14]	1.00	1.00
gamma[15]	1.00	1.00
gamma[16]	1.00	1.00
gamma[17]	1.00	1.02
gamma[18]	1.00	1.01
gamma[19]	1.01	1.02
gamma[20]	1.00	1.00
gamma[21]	1.00	1.00
gamma[22]	1.00	1.00
gamma[23]	1.00	1.00
gamma[24]	1.00	1.00
gamma[25]	1.00	1.00
gamma[26]	1.00	1.00
gamma[27]	1.00	1.01
gamma[28]	1.00	1.00
gamma[29]	1.00	1.00
gamma[30]	1.01	1.02
gamma[31]	1.00	1.01
gamma[32]	1.00	1.01
sigma_y	1.00	1.01
lp__	1.01	1.02

Table 6: Daniel

	Point est.	Upper C.I.
Beta[1]	1.01	1.04
Beta[2]	1.01	1.04
Beta[3]	1.00	1.00
Beta[4]	1.00	1.00
gamma[1]	1.00	1.00
gamma[2]	1.00	1.00
gamma[3]	1.00	1.00
gamma[4]	1.00	1.00
gamma[5]	1.00	1.00
gamma[6]	1.01	1.01
gamma[7]	1.00	1.00
gamma[8]	1.00	1.00
gamma[9]	1.00	1.00
gamma[10]	1.00	1.00
gamma[11]	1.00	1.00
gamma[12]	1.00	1.00
gamma[13]	1.00	1.00
gamma[14]	1.00	1.00
gamma[15]	1.00	1.00
gamma[16]	1.00	1.00
gamma[17]	1.00	1.00
gamma[18]	1.00	1.00
gamma[19]	1.00	1.00
gamma[20]	1.00	1.00
gamma[21]	1.00	1.00
gamma[22]	1.00	1.00
gamma[23]	1.00	1.00
gamma[24]	1.00	1.00
gamma[25]	1.00	1.00
gamma[26]	1.00	1.01
gamma[27]	1.00	1.00
gamma[28]	1.00	1.00
gamma[29]	1.00	1.00
gamma[30]	1.00	1.01
gamma[31]	1.00	1.00
gamma[32]	1.01	1.01
sigma_y	1.03	1.11
lp__	1.00	1.01

Table 7: Douglas

	Point est.	Upper C.I.
Beta[1]	1.00	1.00
Beta[2]	1.00	1.00
Beta[3]	1.00	1.01
Beta[4]	1.01	1.02
gamma[1]	1.00	1.01
gamma[2]	1.00	1.01
gamma[3]	1.00	1.01
gamma[4]	1.00	1.01
gamma[5]	1.00	1.00
gamma[6]	1.00	1.00
gamma[7]	1.00	1.00
gamma[8]	1.01	1.02
gamma[9]	1.00	1.01
gamma[10]	1.00	1.01
gamma[11]	1.00	1.01
gamma[12]	1.00	1.01
gamma[13]	1.00	1.02
gamma[14]	1.00	1.01
gamma[15]	1.00	1.00
gamma[16]	1.00	1.01
gamma[17]	1.00	1.01
gamma[18]	1.00	1.00
gamma[19]	1.00	1.00
gamma[20]	1.00	1.00
gamma[21]	1.00	1.00
gamma[22]	1.01	1.02
gamma[23]	1.01	1.02
gamma[24]	1.00	1.01
gamma[25]	1.01	1.02
gamma[26]	1.00	1.01
gamma[27]	1.00	1.01
gamma[28]	1.00	1.00
gamma[29]	1.00	1.00
gamma[30]	1.00	1.00
gamma[31]	1.00	1.00
gamma[32]	1.00	1.00
sigma_y	1.01	1.02
lp__	1.00	1.00

Table 8: ElkBasinEast

	Point est.	Upper C.I.
Beta[1]	1.01	1.01
Beta[2]	1.01	1.01
Beta[3]	1.02	1.06
Beta[4]	1.01	1.01
gamma[1]	1.01	1.03
gamma[2]	1.01	1.03
gamma[3]	1.01	1.04
gamma[4]	1.01	1.02
gamma[5]	1.00	1.00
gamma[6]	1.00	1.00
gamma[7]	1.00	1.01
gamma[8]	1.01	1.03
gamma[9]	1.01	1.04
gamma[10]	1.01	1.03
gamma[11]	1.00	1.01
gamma[12]	1.01	1.02
gamma[13]	1.02	1.05
gamma[14]	1.00	1.01
gamma[15]	1.00	1.01
gamma[16]	1.00	1.01
gamma[17]	1.00	1.01
gamma[18]	1.01	1.02
gamma[19]	1.01	1.03
gamma[20]	1.01	1.02
gamma[21]	1.02	1.05
gamma[22]	1.02	1.06
gamma[23]	1.01	1.02
gamma[24]	1.00	1.01
gamma[25]	1.01	1.02
gamma[26]	1.01	1.01
gamma[27]	1.01	1.03
gamma[28]	1.00	1.00
gamma[29]	1.00	1.01
gamma[30]	1.00	1.01
gamma[31]	1.01	1.02
gamma[32]	1.01	1.02
sigma_y	1.00	1.00
lp__	1.00	1.00

Table 9: ElkBasinWest

	Point est.	Upper C.I.
Beta[1]	1.00	1.01
Beta[2]	1.00	1.01
Beta[3]	1.04	1.14
Beta[4]	1.15	1.44
gamma[1]	1.00	1.00
gamma[2]	1.05	1.15
gamma[3]	1.06	1.20
gamma[4]	1.11	1.33
gamma[5]	1.04	1.14
gamma[6]	1.00	1.00
gamma[7]	1.03	1.09
gamma[8]	1.06	1.19
gamma[9]	1.05	1.16
gamma[10]	1.02	1.07
gamma[11]	1.10	1.31
gamma[12]	1.11	1.32
gamma[13]	1.00	1.00
gamma[14]	1.03	1.11
gamma[15]	1.01	1.03
gamma[16]	1.05	1.17
gamma[17]	1.05	1.15
gamma[18]	1.12	1.36
gamma[19]	1.01	1.03
gamma[20]	1.03	1.09
gamma[21]	1.02	1.07
gamma[22]	1.02	1.07
gamma[23]	1.12	1.34
gamma[24]	1.10	1.31
gamma[25]	1.11	1.33
gamma[26]	1.05	1.16
gamma[27]	1.04	1.13
gamma[28]	1.00	1.00
gamma[29]	1.03	1.11
gamma[30]	1.05	1.16
gamma[31]	1.06	1.19
gamma[32]	1.06	1.18
sigma_y	1.04	1.11
lp__	1.00	1.02

Table 10: Fontenelle

	Point est.	Upper C.I.
Beta[1]	1.00	1.00
Beta[2]	1.00	1.00
Beta[3]	1.01	1.02
Beta[4]	1.01	1.03
gamma[1]	1.00	1.01
gamma[2]	1.00	1.01
gamma[3]	1.00	1.00
gamma[4]	1.00	1.00
gamma[5]	1.00	1.00
gamma[6]	1.01	1.01
gamma[7]	1.00	1.00
gamma[8]	1.00	1.00
gamma[9]	1.00	1.01
gamma[10]	1.00	1.01
gamma[11]	1.00	1.00
gamma[12]	1.00	1.01
gamma[13]	1.00	1.00
gamma[14]	1.00	1.01
gamma[15]	1.00	1.00
gamma[16]	1.00	1.00
gamma[17]	1.00	1.00
gamma[18]	1.00	1.00
gamma[19]	1.00	1.00
gamma[20]	1.00	1.00
gamma[21]	1.00	1.00
gamma[22]	1.00	1.00
gamma[23]	1.01	1.02
gamma[24]	1.01	1.02
gamma[25]	1.00	1.00
gamma[26]	1.00	1.01
gamma[27]	1.01	1.02
gamma[28]	1.00	1.00
gamma[29]	1.00	1.00
gamma[30]	1.00	1.01
gamma[31]	1.00	1.01
gamma[32]	1.01	1.02
sigma_y	1.01	1.04
lp__	1.00	1.01

Table 11: GrassCreek

	Point est.	Upper C.I.
Beta[1]	1.00	1.00
Beta[2]	1.00	1.00
Beta[3]	1.01	1.02
Beta[4]	1.00	1.01
gamma[1]	1.00	1.01
gamma[2]	1.00	1.01
gamma[3]	1.00	1.01
gamma[4]	1.00	1.00
gamma[5]	1.00	1.00
gamma[6]	1.00	1.01
gamma[7]	1.00	1.01
gamma[8]	1.01	1.02
gamma[9]	1.00	1.01
gamma[10]	1.00	1.01
gamma[11]	1.00	1.01
gamma[12]	1.00	1.01
gamma[13]	1.00	1.00
gamma[14]	1.00	1.00
gamma[15]	1.00	1.00
gamma[16]	1.00	1.00
gamma[17]	1.00	1.00
gamma[18]	1.00	1.01
gamma[19]	1.00	1.01
gamma[20]	1.00	1.01
gamma[21]	1.00	1.01
gamma[22]	1.01	1.02
gamma[23]	1.00	1.00
gamma[24]	1.00	1.00
gamma[25]	1.00	1.01
gamma[26]	1.00	1.01
gamma[27]	1.00	1.01
gamma[28]	1.00	1.00
gamma[29]	1.00	1.00
gamma[30]	1.00	1.00
gamma[31]	1.00	1.00
gamma[32]	1.00	1.00
sigma_y	1.00	1.01
lp__	1.01	1.03

Table 12: GreaterSouthPass1

	Point est.	Upper C.I.
Beta[1]	1.00	1.00
Beta[2]	1.00	1.00
Beta[3]	1.00	1.00
Beta[4]	1.00	1.01
gamma[1]	1.00	1.00
gamma[2]	1.00	1.00
gamma[3]	1.00	1.00
gamma[4]	1.00	1.01
gamma[5]	1.00	1.01
gamma[6]	1.00	1.00
gamma[7]	1.00	1.00
gamma[8]	1.00	1.00
gamma[9]	1.00	1.00
gamma[10]	1.00	1.00
gamma[11]	1.00	1.00
gamma[12]	1.00	1.00
gamma[13]	1.00	1.01
gamma[14]	1.00	1.00
gamma[15]	1.00	1.00
gamma[16]	1.00	1.00
gamma[17]	1.00	1.00
gamma[18]	1.00	1.00
gamma[19]	1.00	1.00
gamma[20]	1.00	1.00
gamma[21]	1.00	1.00
gamma[22]	1.00	1.00
gamma[23]	1.00	1.01
gamma[24]	1.00	1.02
gamma[25]	1.00	1.00
gamma[26]	1.00	1.00
gamma[27]	1.00	1.00
gamma[28]	1.00	1.00
gamma[29]	1.00	1.00
gamma[30]	1.00	1.00
gamma[31]	1.00	1.01
gamma[32]	1.01	1.01
sigma_y	1.07	1.18
lp__	1.01	1.05

Table 13: GreaterSouthPass2

	Point est.	Upper C.I.
Beta[1]	1.00	1.00
Beta[2]	1.00	1.00
Beta[3]	1.01	1.05
Beta[4]	1.00	1.01
gamma[1]	1.01	1.02
gamma[2]	1.00	1.01
gamma[3]	1.00	1.01
gamma[4]	1.01	1.03
gamma[5]	1.00	1.01
gamma[6]	1.00	1.00
gamma[7]	1.01	1.03
gamma[8]	1.00	1.00
gamma[9]	1.01	1.02
gamma[10]	1.00	1.02
gamma[11]	1.01	1.04
gamma[12]	1.00	1.01
gamma[13]	1.00	1.01
gamma[14]	1.01	1.02
gamma[15]	1.01	1.02
gamma[16]	1.00	1.01
gamma[17]	1.01	1.02
gamma[18]	1.00	1.01
gamma[19]	1.00	1.01
gamma[20]	1.00	1.00
gamma[21]	1.00	1.00
gamma[22]	1.01	1.04
gamma[23]	1.00	1.01
gamma[24]	1.00	1.01
gamma[25]	1.00	1.02
gamma[26]	1.00	1.01
gamma[27]	1.00	1.01
gamma[28]	1.01	1.03
gamma[29]	1.00	1.00
gamma[30]	1.01	1.02
gamma[31]	1.01	1.04
gamma[32]	1.00	1.00
sigma_y	1.01	1.03
lp__	1.01	1.03

Table 14: GreaterSouthPass3

	Point est.	Upper C.I.
Beta[1]	1.00	1.00
Beta[2]	1.00	1.00
Beta[3]	1.00	1.01
Beta[4]	1.00	1.00
gamma[1]	1.00	1.00
gamma[2]	1.00	1.01
gamma[3]	1.00	1.01
gamma[4]	1.00	1.00
gamma[5]	1.00	1.00
gamma[6]	1.00	1.00
gamma[7]	1.00	1.00
gamma[8]	1.00	1.00
gamma[9]	1.00	1.01
gamma[10]	1.00	1.01
gamma[11]	1.00	1.01
gamma[12]	1.00	1.00
gamma[13]	1.00	1.00
gamma[14]	1.00	1.00
gamma[15]	1.00	1.00
gamma[16]	1.00	1.00
gamma[17]	1.00	1.01
gamma[18]	1.00	1.01
gamma[19]	1.00	1.00
gamma[20]	1.01	1.01
gamma[21]	1.00	1.00
gamma[22]	1.00	1.01
gamma[23]	1.00	1.00
gamma[24]	1.00	1.00
gamma[25]	1.00	1.00
gamma[26]	1.00	1.00
gamma[27]	1.00	1.00
gamma[28]	1.00	1.00
gamma[29]	1.00	1.00
gamma[30]	1.00	1.00
gamma[31]	1.00	1.00
gamma[32]	1.00	1.00
sigma_y	1.05	1.15
lp__	1.00	1.00

Table 15: GreaterSouthPass4

	Point est.	Upper C.I.
Beta[1]	1.00	1.02
Beta[2]	1.01	1.02
Beta[3]	1.01	1.02
Beta[4]	1.00	1.01
gamma[1]	1.01	1.01
gamma[2]	1.00	1.00
gamma[3]	1.00	1.00
gamma[4]	1.01	1.02
gamma[5]	1.00	1.00
gamma[6]	1.00	1.00
gamma[7]	1.00	1.00
gamma[8]	1.00	1.00
gamma[9]	1.00	1.02
gamma[10]	1.00	1.01
gamma[11]	1.00	1.01
gamma[12]	1.00	1.01
gamma[13]	1.01	1.01
gamma[14]	1.01	1.01
gamma[15]	1.00	1.00
gamma[16]	1.00	1.00
gamma[17]	1.01	1.02
gamma[18]	1.00	1.00
gamma[19]	1.00	1.01
gamma[20]	1.00	1.00
gamma[21]	1.00	1.00
gamma[22]	1.01	1.02
gamma[23]	1.00	1.01
gamma[24]	1.00	1.00
gamma[25]	1.00	1.01
gamma[26]	1.00	1.01
gamma[27]	1.00	1.00
gamma[28]	1.01	1.02
gamma[29]	1.00	1.00
gamma[30]	1.00	1.01
gamma[31]	1.00	1.01
gamma[32]	1.00	1.01
sigma_y	1.01	1.02
lp__	1.00	1.00

Table 16: GreaterSouthPass5

	Point est.	Upper C.I.
Beta[1]	1.00	1.01
Beta[2]	1.00	1.01
Beta[3]	1.01	1.03
Beta[4]	1.00	1.01
gamma[1]	1.00	1.01
gamma[2]	1.00	1.01
gamma[3]	1.00	1.00
gamma[4]	1.00	1.01
gamma[5]	1.00	1.00
gamma[6]	1.00	1.00
gamma[7]	1.00	1.00
gamma[8]	1.00	1.00
gamma[9]	1.00	1.00
gamma[10]	1.00	1.01
gamma[11]	1.00	1.01
gamma[12]	1.00	1.00
gamma[13]	1.00	1.01
gamma[14]	1.00	1.00
gamma[15]	1.00	1.00
gamma[16]	1.00	1.00
gamma[17]	1.00	1.00
gamma[18]	1.00	1.01
gamma[19]	1.00	1.01
gamma[20]	1.00	1.00
gamma[21]	1.00	1.01
gamma[22]	1.00	1.00
gamma[23]	1.00	1.00
gamma[24]	1.00	1.01
gamma[25]	1.01	1.02
gamma[26]	1.00	1.01
gamma[27]	1.00	1.00
gamma[28]	1.00	1.01
gamma[29]	1.00	1.00
gamma[30]	1.00	1.01
gamma[31]	1.00	1.01
gamma[32]	1.00	1.00
sigma_y	1.03	1.08
lp__	1.00	1.01

Table 17: Hanna

	Point est.	Upper C.I.
Beta[1]	1.00	1.00
Beta[2]	1.00	1.00
Beta[3]	1.00	1.01
Beta[4]	1.00	1.01
gamma[1]	1.00	1.00
gamma[2]	1.00	1.00
gamma[3]	1.00	1.01
gamma[4]	1.01	1.02
gamma[5]	1.00	1.00
gamma[6]	1.00	1.00
gamma[7]	1.00	1.01
gamma[8]	1.00	1.00
gamma[9]	1.00	1.00
gamma[10]	1.00	1.00
gamma[11]	1.00	1.01
gamma[12]	1.00	1.00
gamma[13]	1.00	1.00
gamma[14]	1.00	1.00
gamma[15]	1.00	1.00
gamma[16]	1.00	1.00
gamma[17]	1.00	1.00
gamma[18]	1.00	1.01
gamma[19]	1.01	1.01
gamma[20]	1.00	1.01
gamma[21]	1.00	1.00
gamma[22]	1.00	1.00
gamma[23]	1.00	1.02
gamma[24]	1.00	1.01
gamma[25]	1.00	1.00
gamma[26]	1.00	1.00
gamma[27]	1.00	1.01
gamma[28]	1.00	1.01
gamma[29]	1.00	1.00
gamma[30]	1.00	1.01
gamma[31]	1.00	1.00
gamma[32]	1.00	1.01
sigma_y	1.04	1.13
lp__	1.00	1.00

Table 18: HeartMountain

	Point est.	Upper C.I.
Beta[1]	1.00	1.01
Beta[2]	1.01	1.01
Beta[3]	1.01	1.03
Beta[4]	1.01	1.04
gamma[1]	1.00	1.02
gamma[2]	1.00	1.01
gamma[3]	1.01	1.02
gamma[4]	1.00	1.01
gamma[5]	1.00	1.00
gamma[6]	1.00	1.01
gamma[7]	1.00	1.00
gamma[8]	1.01	1.03
gamma[9]	1.00	1.00
gamma[10]	1.00	1.00
gamma[11]	1.00	1.01
gamma[12]	1.00	1.01
gamma[13]	1.00	1.00
gamma[14]	1.00	1.01
gamma[15]	1.00	1.00
gamma[16]	1.00	1.00
gamma[17]	1.00	1.01
gamma[18]	1.00	1.01
gamma[19]	1.00	1.00
gamma[20]	1.00	1.02
gamma[21]	1.00	1.00
gamma[22]	1.00	1.01
gamma[23]	1.00	1.01
gamma[24]	1.00	1.01
gamma[25]	1.00	1.00
gamma[26]	1.00	1.01
gamma[27]	1.00	1.02
gamma[28]	1.00	1.00
gamma[29]	1.00	1.02
gamma[30]	1.00	1.01
gamma[31]	1.00	1.01
gamma[32]	1.00	1.01
sigma_y	1.00	1.02
lp__	1.01	1.03

Table 19: Hyattville

	Point est.	Upper C.I.
Beta[1]	1.00	1.00
Beta[2]	1.00	1.00
Beta[3]	1.00	1.00
Beta[4]	1.00	1.00
gamma[1]	1.00	1.00
gamma[2]	1.00	1.00
gamma[3]	1.00	1.00
gamma[4]	1.00	1.01
gamma[5]	1.00	1.00
gamma[6]	1.00	1.01
gamma[7]	1.00	1.02
gamma[8]	1.00	1.00
gamma[9]	1.00	1.01
gamma[10]	1.00	1.00
gamma[11]	1.00	1.00
gamma[12]	1.00	1.00
gamma[13]	1.00	1.00
gamma[14]	1.01	1.01
gamma[15]	1.00	1.01
gamma[16]	1.01	1.01
gamma[17]	1.01	1.01
gamma[18]	1.00	1.01
gamma[19]	1.00	1.01
gamma[20]	1.00	1.00
gamma[21]	1.00	1.00
gamma[22]	1.00	1.00
gamma[23]	1.00	1.00
gamma[24]	1.00	1.00
gamma[25]	1.00	1.00
gamma[26]	1.00	1.00
gamma[27]	1.00	1.00
gamma[28]	1.00	1.00
gamma[29]	1.00	1.00
gamma[30]	1.00	1.00
gamma[31]	1.00	1.00
gamma[32]	1.00	1.01
sigma_y	1.01	1.02
lp__	1.00	1.01

Table 20: Jackson

	Point est.	Upper C.I.
Beta[1]	1.00	1.01
Beta[2]	1.00	1.01
Beta[3]	1.00	1.01
Beta[4]	1.00	1.00
gamma[1]	1.00	1.00
gamma[2]	1.00	1.00
gamma[3]	1.00	1.00
gamma[4]	1.00	1.00
gamma[5]	1.00	1.01
gamma[6]	1.00	1.00
gamma[7]	1.00	1.00
gamma[8]	1.00	1.00
gamma[9]	1.00	1.00
gamma[10]	1.00	1.00
gamma[11]	1.00	1.00
gamma[12]	1.00	1.00
gamma[13]	1.00	1.00
gamma[14]	1.00	1.00
gamma[15]	1.00	1.00
gamma[16]	1.00	1.00
gamma[17]	1.00	1.00
gamma[18]	1.00	1.01
gamma[19]	1.00	1.00
gamma[20]	1.00	1.01
gamma[21]	1.00	1.00
gamma[22]	1.00	1.00
gamma[23]	1.00	1.01
gamma[24]	1.00	1.01
gamma[25]	1.00	1.00
gamma[26]	1.00	1.00
gamma[27]	1.00	1.00
gamma[28]	1.00	1.00
gamma[29]	1.00	1.00
gamma[30]	1.00	1.00
gamma[31]	1.00	1.00
gamma[32]	1.00	1.01
sigma_y	1.02	1.05
lp__	1.00	1.02

Table 21: LittleMountain

	Point est.	Upper C.I.
Beta[1]	1.00	1.00
Beta[2]	1.00	1.00
Beta[3]	1.01	1.03
Beta[4]	1.00	1.01
gamma[1]	1.00	1.00
gamma[2]	1.00	1.01
gamma[3]	1.00	1.01
gamma[4]	1.00	1.00
gamma[5]	1.00	1.00
gamma[6]	1.00	1.01
gamma[7]	1.00	1.00
gamma[8]	1.01	1.02
gamma[9]	1.00	1.01
gamma[10]	1.00	1.00
gamma[11]	1.00	1.00
gamma[12]	1.00	1.01
gamma[13]	1.00	1.00
gamma[14]	1.00	1.00
gamma[15]	1.00	1.00
gamma[16]	1.00	1.00
gamma[17]	1.01	1.03
gamma[18]	1.00	1.01
gamma[19]	1.00	1.00
gamma[20]	1.00	1.01
gamma[21]	1.00	1.01
gamma[22]	1.00	1.00
gamma[23]	1.00	1.01
gamma[24]	1.00	1.00
gamma[25]	1.00	1.01
gamma[26]	1.00	1.01
gamma[27]	1.01	1.02
gamma[28]	1.00	1.00
gamma[29]	1.00	1.00
gamma[30]	1.00	1.00
gamma[31]	1.01	1.01
gamma[32]	1.00	1.00
sigma_y	1.00	1.00
lp__	1.00	1.01

Table 22: Natrona1

	Point est.	Upper C.I.
Beta[1]	1.00	1.00
Beta[2]	1.00	1.00
Beta[3]	1.00	1.00
Beta[4]	1.00	1.00
gamma[1]	1.00	1.00
gamma[2]	1.00	1.00
gamma[3]	1.00	1.01
gamma[4]	1.00	1.00
gamma[5]	1.00	1.00
gamma[6]	1.00	1.00
gamma[7]	1.00	1.01
gamma[8]	1.00	1.00
gamma[9]	1.00	1.01
gamma[10]	1.00	1.00
gamma[11]	1.00	1.01
gamma[12]	1.00	1.00
gamma[13]	1.00	1.00
gamma[14]	1.00	1.00
gamma[15]	1.00	1.00
gamma[16]	1.00	1.01
gamma[17]	1.00	1.00
gamma[18]	1.01	1.01
gamma[19]	1.00	1.01
gamma[20]	1.00	1.00
gamma[21]	1.00	1.00
gamma[22]	1.00	1.01
gamma[23]	1.00	1.00
gamma[24]	1.00	1.00
gamma[25]	1.00	1.00
gamma[26]	1.00	1.00
gamma[27]	1.00	1.00
gamma[28]	1.00	1.00
gamma[29]	1.00	1.00
gamma[30]	1.00	1.00
gamma[31]	1.00	1.00
gamma[32]	1.00	1.00
sigma_y	1.01	1.02
lp__	1.00	1.01

Table 23: Natrona2

	Point est.	Upper C.I.
Beta[1]	1.01	1.02
Beta[2]	1.01	1.02
Beta[3]	1.00	1.02
Beta[4]	1.01	1.02
gamma[1]	1.00	1.00
gamma[2]	1.00	1.01
gamma[3]	1.00	1.01
gamma[4]	1.00	1.00
gamma[5]	1.00	1.01
gamma[6]	1.00	1.00
gamma[7]	1.00	1.00
gamma[8]	1.00	1.00
gamma[9]	1.00	1.00
gamma[10]	1.00	1.00
gamma[11]	1.00	1.00
gamma[12]	1.00	1.01
gamma[13]	1.00	1.00
gamma[14]	1.00	1.00
gamma[15]	1.00	1.01
gamma[16]	1.00	1.00
gamma[17]	1.00	1.01
gamma[18]	1.00	1.01
gamma[19]	1.00	1.01
gamma[20]	1.00	1.01
gamma[21]	1.00	1.00
gamma[22]	1.00	1.01
gamma[23]	1.00	1.02
gamma[24]	1.00	1.00
gamma[25]	1.00	1.00
gamma[26]	1.00	1.00
gamma[27]	1.00	1.00
gamma[28]	1.00	1.00
gamma[29]	1.00	1.01
gamma[30]	1.00	1.01
gamma[31]	1.00	1.01
gamma[32]	1.00	1.01
sigma_y	1.02	1.07
lp__	1.01	1.01

Table 24: Natrona3

	Point est.	Upper C.I.
Beta[1]	1.00	1.01
Beta[2]	1.00	1.01
Beta[3]	1.00	1.00
Beta[4]	1.00	1.01
gamma[1]	1.00	1.00
gamma[2]	1.01	1.01
gamma[3]	1.00	1.00
gamma[4]	1.01	1.03
gamma[5]	1.00	1.01
gamma[6]	1.01	1.01
gamma[7]	1.00	1.00
gamma[8]	1.00	1.00
gamma[9]	1.00	1.01
gamma[10]	1.00	1.01
gamma[11]	1.00	1.00
gamma[12]	1.00	1.00
gamma[13]	1.00	1.00
gamma[14]	1.00	1.00
gamma[15]	1.00	1.00
gamma[16]	1.00	1.00
gamma[17]	1.00	1.01
gamma[18]	1.00	1.01
gamma[19]	1.00	1.00
gamma[20]	1.00	1.00
gamma[21]	1.00	1.00
gamma[22]	1.00	1.00
gamma[23]	1.00	1.00
gamma[24]	1.00	1.00
gamma[25]	1.01	1.02
gamma[26]	1.00	1.01
gamma[27]	1.00	1.01
gamma[28]	1.00	1.01
gamma[29]	1.00	1.00
gamma[30]	1.00	1.00
gamma[31]	1.00	1.00
gamma[32]	1.00	1.00
sigma_y	1.02	1.07
lp__	1.01	1.02

Table 25: Newcastle

	Point est.	Upper C.I.
Beta[1]	1.00	1.02
Beta[2]	1.00	1.01
Beta[3]	1.00	1.01
Beta[4]	1.01	1.04
gamma[1]	1.00	1.01
gamma[2]	1.00	1.00
gamma[3]	1.00	1.01
gamma[4]	1.01	1.03
gamma[5]	1.00	1.00
gamma[6]	1.00	1.00
gamma[7]	1.00	1.00
gamma[8]	1.00	1.00
gamma[9]	1.00	1.01
gamma[10]	1.00	1.00
gamma[11]	1.00	1.01
gamma[12]	1.01	1.03
gamma[13]	1.00	1.01
gamma[14]	1.01	1.02
gamma[15]	1.00	1.00
gamma[16]	1.00	1.02
gamma[17]	1.00	1.01
gamma[18]	1.00	1.01
gamma[19]	1.00	1.01
gamma[20]	1.00	1.00
gamma[21]	1.00	1.01
gamma[22]	1.00	1.02
gamma[23]	1.01	1.02
gamma[24]	1.00	1.01
gamma[25]	1.00	1.01
gamma[26]	1.00	1.00
gamma[27]	1.00	1.00
gamma[28]	1.00	1.02
gamma[29]	1.00	1.01
gamma[30]	1.00	1.01
gamma[31]	1.00	1.00
gamma[32]	1.00	1.00
sigma_y	1.01	1.04
lp__	1.00	1.01

Table 26: NorthGillette

	Point est.	Upper C.I.
Beta[1]	1.00	1.01
Beta[2]	1.00	1.01
Beta[3]	1.01	1.05
Beta[4]	1.01	1.02
gamma[1]	1.00	1.01
gamma[2]	1.00	1.02
gamma[3]	1.01	1.02
gamma[4]	1.01	1.02
gamma[5]	1.00	1.01
gamma[6]	1.01	1.01
gamma[7]	1.00	1.01
gamma[8]	1.00	1.01
gamma[9]	1.00	1.01
gamma[10]	1.00	1.02
gamma[11]	1.01	1.02
gamma[12]	1.01	1.02
gamma[13]	1.01	1.04
gamma[14]	1.00	1.01
gamma[15]	1.00	1.01
gamma[16]	1.00	1.01
gamma[17]	1.00	1.01
gamma[18]	1.01	1.03
gamma[19]	1.00	1.00
gamma[20]	1.01	1.04
gamma[21]	1.00	1.01
gamma[22]	1.00	1.00
gamma[23]	1.01	1.03
gamma[24]	1.01	1.02
gamma[25]	1.01	1.02
gamma[26]	1.01	1.02
gamma[27]	1.00	1.02
gamma[28]	1.01	1.04
gamma[29]	1.00	1.01
gamma[30]	1.01	1.03
gamma[31]	1.00	1.01
gamma[32]	1.00	1.01
sigma_y	1.01	1.03
lp__	1.00	1.01

Table 27: NorthGlenrock

	Point est.	Upper C.I.
Beta[1]	1.00	1.00
Beta[2]	1.00	1.00
Beta[3]	1.01	1.02
Beta[4]	1.01	1.01
gamma[1]	1.01	1.01
gamma[2]	1.00	1.00
gamma[3]	1.00	1.01
gamma[4]	1.00	1.02
gamma[5]	1.01	1.03
gamma[6]	1.00	1.00
gamma[7]	1.00	1.01
gamma[8]	1.00	1.00
gamma[9]	1.00	1.00
gamma[10]	1.00	1.01
gamma[11]	1.00	1.01
gamma[12]	1.01	1.01
gamma[13]	1.00	1.00
gamma[14]	1.00	1.00
gamma[15]	1.00	1.00
gamma[16]	1.00	1.00
gamma[17]	1.00	1.01
gamma[18]	1.01	1.02
gamma[19]	1.00	1.00
gamma[20]	1.00	1.01
gamma[21]	1.00	1.00
gamma[22]	1.00	1.01
gamma[23]	1.01	1.01
gamma[24]	1.00	1.01
gamma[25]	1.00	1.00
gamma[26]	1.00	1.01
gamma[27]	1.00	1.01
gamma[28]	1.00	1.00
gamma[29]	1.00	1.00
gamma[30]	1.00	1.01
gamma[31]	1.00	1.01
gamma[32]	1.00	1.01
sigma_y	1.01	1.01
lp__	1.00	1.01

Table 28: NorthLaramie

	Point est.	Upper C.I.
Beta[1]	1.00	1.01
Beta[2]	1.00	1.01
Beta[3]	1.01	1.02
Beta[4]	1.00	1.02
gamma[1]	1.00	1.01
gamma[2]	1.00	1.00
gamma[3]	1.00	1.00
gamma[4]	1.00	1.01
gamma[5]	1.00	1.01
gamma[6]	1.00	1.00
gamma[7]	1.00	1.01
gamma[8]	1.00	1.00
gamma[9]	1.00	1.00
gamma[10]	1.00	1.00
gamma[11]	1.01	1.01
gamma[12]	1.00	1.00
gamma[13]	1.00	1.00
gamma[14]	1.00	1.01
gamma[15]	1.00	1.00
gamma[16]	1.00	1.00
gamma[17]	1.00	1.01
gamma[18]	1.00	1.00
gamma[19]	1.00	1.02
gamma[20]	1.00	1.00
gamma[21]	1.00	1.00
gamma[22]	1.00	1.00
gamma[23]	1.00	1.01
gamma[24]	1.00	1.00
gamma[25]	1.00	1.00
gamma[26]	1.00	1.01
gamma[27]	1.00	1.01
gamma[28]	1.00	1.00
gamma[29]	1.00	1.00
gamma[30]	1.00	1.01
gamma[31]	1.01	1.01
gamma[32]	1.01	1.01
sigma_y	1.01	1.02
lp__	1.00	1.00

Table 29: OregonBasin

	Point est.	Upper C.I.
Beta[1]	1.00	1.00
Beta[2]	1.00	1.00
Beta[3]	1.00	1.01
Beta[4]	1.00	1.01
gamma[1]	1.00	1.00
gamma[2]	1.00	1.00
gamma[3]	1.00	1.00
gamma[4]	1.00	1.00
gamma[5]	1.00	1.00
gamma[6]	1.00	1.00
gamma[7]	1.00	1.00
gamma[8]	1.01	1.01
gamma[9]	1.00	1.00
gamma[10]	1.00	1.00
gamma[11]	1.00	1.00
gamma[12]	1.00	1.01
gamma[13]	1.00	1.00
gamma[14]	1.00	1.00
gamma[15]	1.00	1.01
gamma[16]	1.00	1.00
gamma[17]	1.00	1.00
gamma[18]	1.00	1.00
gamma[19]	1.00	1.00
gamma[20]	1.00	1.00
gamma[21]	1.00	1.00
gamma[22]	1.00	1.00
gamma[23]	1.00	1.00
gamma[24]	1.00	1.00
gamma[25]	1.00	1.01
gamma[26]	1.00	1.00
gamma[27]	1.00	1.01
gamma[28]	1.00	1.00
gamma[29]	1.00	1.00
gamma[30]	1.00	1.00
gamma[31]	1.00	1.01
gamma[32]	1.00	1.01
sigma_y	1.01	1.03
lp__	1.00	1.01

Table 30: Powder

	Point est.	Upper C.I.
Beta[1]	1.01	1.01
Beta[2]	1.01	1.02
Beta[3]	1.01	1.05
Beta[4]	1.00	1.00
gamma[1]	1.00	1.02
gamma[2]	1.01	1.04
gamma[3]	1.00	1.01
gamma[4]	1.02	1.05
gamma[5]	1.01	1.05
gamma[6]	1.01	1.02
gamma[7]	1.01	1.02
gamma[8]	1.00	1.01
gamma[9]	1.01	1.03
gamma[10]	1.01	1.03
gamma[11]	1.01	1.04
gamma[12]	1.01	1.03
gamma[13]	1.01	1.02
gamma[14]	1.01	1.02
gamma[15]	1.01	1.04
gamma[16]	1.01	1.03
gamma[17]	1.01	1.02
gamma[18]	1.02	1.05
gamma[19]	1.00	1.01
gamma[20]	1.01	1.03
gamma[21]	1.00	1.00
gamma[22]	1.01	1.03
gamma[23]	1.01	1.02
gamma[24]	1.00	1.02
gamma[25]	1.01	1.04
gamma[26]	1.01	1.02
gamma[27]	1.01	1.04
gamma[28]	1.01	1.03
gamma[29]	1.00	1.00
gamma[30]	1.01	1.03
gamma[31]	1.01	1.03
gamma[32]	1.00	1.02
sigma_y	1.00	1.01
lp__	1.00	1.00

Table 31: Sage

	Point est.	Upper C.I.
Beta[1]	1.01	1.03
Beta[2]	1.01	1.02
Beta[3]	1.01	1.02
Beta[4]	1.01	1.02
gamma[1]	1.00	1.01
gamma[2]	1.00	1.01
gamma[3]	1.00	1.00
gamma[4]	1.00	1.01
gamma[5]	1.00	1.00
gamma[6]	1.00	1.01
gamma[7]	1.00	1.00
gamma[8]	1.00	1.01
gamma[9]	1.00	1.00
gamma[10]	1.00	1.01
gamma[11]	1.00	1.00
gamma[12]	1.00	1.01
gamma[13]	1.00	1.00
gamma[14]	1.00	1.01
gamma[15]	1.00	1.00
gamma[16]	1.00	1.00
gamma[17]	1.00	1.00
gamma[18]	1.00	1.00
gamma[19]	1.00	1.00
gamma[20]	1.00	1.00
gamma[21]	1.00	1.01
gamma[22]	1.00	1.00
gamma[23]	1.00	1.00
gamma[24]	1.01	1.02
gamma[25]	1.00	1.00
gamma[26]	1.00	1.00
gamma[27]	1.00	1.00
gamma[28]	1.00	1.00
gamma[29]	1.00	1.01
gamma[30]	1.00	1.01
gamma[31]	1.00	1.01
gamma[32]	1.00	1.00
sigma_y	1.05	1.18
lp__	1.00	1.01

Table 32: SaltWells

	Point est.	Upper C.I.
Beta[1]	1.00	1.01
Beta[2]	1.00	1.01
Beta[3]	1.00	1.00
Beta[4]	1.01	1.01
gamma[1]	1.00	1.00
gamma[2]	1.00	1.00
gamma[3]	1.00	1.00
gamma[4]	1.00	1.00
gamma[5]	1.00	1.00
gamma[6]	1.00	1.01
gamma[7]	1.00	1.00
gamma[8]	1.00	1.00
gamma[9]	1.00	1.00
gamma[10]	1.00	1.00
gamma[11]	1.00	1.00
gamma[12]	1.00	1.00
gamma[13]	1.00	1.00
gamma[14]	1.00	1.00
gamma[15]	1.00	1.00
gamma[16]	1.00	1.00
gamma[17]	1.00	1.00
gamma[18]	1.00	1.00
gamma[19]	1.00	1.01
gamma[20]	1.00	1.00
gamma[21]	1.00	1.00
gamma[22]	1.01	1.01
gamma[23]	1.00	1.00
gamma[24]	1.00	1.00
gamma[25]	1.00	1.00
gamma[26]	1.00	1.00
gamma[27]	1.00	1.00
gamma[28]	1.00	1.01
gamma[29]	1.00	1.00
gamma[30]	1.00	1.00
gamma[31]	1.00	1.00
gamma[32]	1.00	1.00
sigma_y	1.02	1.05
lp__	1.00	1.01

Table 33: Seedskadee

	Point est.	Upper C.I.
Beta[1]	1.01	1.01
Beta[2]	1.01	1.01
Beta[3]	1.02	1.07
Beta[4]	1.00	1.00
gamma[1]	1.02	1.08
gamma[2]	1.02	1.06
gamma[3]	1.02	1.06
gamma[4]	1.02	1.06
gamma[5]	1.01	1.05
gamma[6]	1.01	1.02
gamma[7]	1.02	1.06
gamma[8]	1.01	1.03
gamma[9]	1.01	1.04
gamma[10]	1.02	1.07
gamma[11]	1.02	1.06
gamma[12]	1.01	1.05
gamma[13]	1.01	1.04
gamma[14]	1.02	1.06
gamma[15]	1.01	1.04
gamma[16]	1.02	1.06
gamma[17]	1.01	1.05
gamma[18]	1.02	1.07
gamma[19]	1.01	1.02
gamma[20]	1.01	1.02
gamma[21]	1.01	1.03
gamma[22]	1.02	1.07
gamma[23]	1.01	1.04
gamma[24]	1.02	1.07
gamma[25]	1.01	1.05
gamma[26]	1.01	1.03
gamma[27]	1.02	1.06
gamma[28]	1.01	1.05
gamma[29]	1.01	1.03
gamma[30]	1.02	1.07
gamma[31]	1.02	1.07
gamma[32]	1.01	1.03
sigma_y	1.00	1.00
lp__	1.00	1.00

Table 34: Shell

	Point est.	Upper C.I.
Beta[1]	1.00	1.00
Beta[2]	1.00	1.00
Beta[3]	1.02	1.07
Beta[4]	1.02	1.07
gamma[1]	1.00	1.02
gamma[2]	1.00	1.01
gamma[3]	1.02	1.05
gamma[4]	1.00	1.00
gamma[5]	1.01	1.02
gamma[6]	1.00	1.00
gamma[7]	1.00	1.00
gamma[8]	1.01	1.05
gamma[9]	1.01	1.02
gamma[10]	1.01	1.01
gamma[11]	1.00	1.00
gamma[12]	1.00	1.02
gamma[13]	1.01	1.03
gamma[14]	1.00	1.02
gamma[15]	1.00	1.00
gamma[16]	1.00	1.01
gamma[17]	1.01	1.02
gamma[18]	1.01	1.04
gamma[19]	1.00	1.00
gamma[20]	1.01	1.02
gamma[21]	1.01	1.02
gamma[22]	1.01	1.02
gamma[23]	1.01	1.05
gamma[24]	1.00	1.00
gamma[25]	1.00	1.00
gamma[26]	1.00	1.00
gamma[27]	1.01	1.02
gamma[28]	1.01	1.03
gamma[29]	1.01	1.01
gamma[30]	1.00	1.00
gamma[31]	1.00	1.01
gamma[32]	1.01	1.01
sigma_y	1.01	1.03
lp__	1.00	1.01

Table 35: SouthRawlins

	Point est.	Upper C.I.
Beta[1]	1.00	1.00
Beta[2]	1.00	1.00
Beta[3]	1.00	1.01
Beta[4]	1.00	1.01
gamma[1]	1.00	1.00
gamma[2]	1.00	1.00
gamma[3]	1.00	1.01
gamma[4]	1.00	1.00
gamma[5]	1.00	1.00
gamma[6]	1.00	1.00
gamma[7]	1.00	1.01
gamma[8]	1.00	1.00
gamma[9]	1.00	1.01
gamma[10]	1.00	1.00
gamma[11]	1.00	1.00
gamma[12]	1.00	1.00
gamma[13]	1.01	1.01
gamma[14]	1.00	1.00
gamma[15]	1.01	1.01
gamma[16]	1.01	1.01
gamma[17]	1.00	1.00
gamma[18]	1.00	1.01
gamma[19]	1.00	1.00
gamma[20]	1.00	1.00
gamma[21]	1.00	1.00
gamma[22]	1.00	1.00
gamma[23]	1.00	1.00
gamma[24]	1.00	1.01
gamma[25]	1.00	1.01
gamma[26]	1.00	1.00
gamma[27]	1.00	1.00
gamma[28]	1.00	1.00
gamma[29]	1.00	1.00
gamma[30]	1.00	1.00
gamma[31]	1.00	1.00
gamma[32]	1.00	1.00
sigma_y	1.01	1.03
lp__	1.00	1.00

Table 36: Thermopolis

	Point est.	Upper C.I.
Beta[1]	1.00	1.00
Beta[2]	1.00	1.00
Beta[3]	1.01	1.03
Beta[4]	1.01	1.02
gamma[1]	1.00	1.01
gamma[2]	1.00	1.01
gamma[3]	1.00	1.00
gamma[4]	1.00	1.00
gamma[5]	1.00	1.01
gamma[6]	1.00	1.00
gamma[7]	1.00	1.02
gamma[8]	1.01	1.03
gamma[9]	1.00	1.00
gamma[10]	1.00	1.01
gamma[11]	1.00	1.00
gamma[12]	1.01	1.03
gamma[13]	1.00	1.01
gamma[14]	1.00	1.01
gamma[15]	1.00	1.00
gamma[16]	1.00	1.01
gamma[17]	1.00	1.01
gamma[18]	1.01	1.02
gamma[19]	1.00	1.00
gamma[20]	1.00	1.00
gamma[21]	1.00	1.01
gamma[22]	1.00	1.01
gamma[23]	1.01	1.01
gamma[24]	1.01	1.01
gamma[25]	1.00	1.01
gamma[26]	1.00	1.01
gamma[27]	1.01	1.02
gamma[28]	1.01	1.02
gamma[29]	1.01	1.02
gamma[30]	1.00	1.02
gamma[31]	1.00	1.01
gamma[32]	1.01	1.03
sigma_y	1.00	1.01
lp__	1.00	1.01

Table 37: ThunderBasin

	Point est.	Upper C.I.
Beta[1]	1.00	1.01
Beta[2]	1.00	1.01
Beta[3]	1.01	1.02
Beta[4]	1.00	1.00
gamma[1]	1.00	1.00
gamma[2]	1.00	1.00
gamma[3]	1.00	1.01
gamma[4]	1.00	1.01
gamma[5]	1.00	1.01
gamma[6]	1.00	1.00
gamma[7]	1.00	1.00
gamma[8]	1.01	1.01
gamma[9]	1.00	1.01
gamma[10]	1.00	1.00
gamma[11]	1.00	1.00
gamma[12]	1.00	1.00
gamma[13]	1.00	1.00
gamma[14]	1.00	1.01
gamma[15]	1.00	1.00
gamma[16]	1.00	1.01
gamma[17]	1.00	1.01
gamma[18]	1.00	1.00
gamma[19]	1.00	1.01
gamma[20]	1.00	1.01
gamma[21]	1.00	1.00
gamma[22]	1.00	1.00
gamma[23]	1.00	1.00
gamma[24]	1.00	1.00
gamma[25]	1.00	1.01
gamma[26]	1.00	1.00
gamma[27]	1.00	1.01
gamma[28]	1.00	1.00
gamma[29]	1.00	1.00
gamma[30]	1.00	1.01
gamma[31]	1.00	1.00
gamma[32]	1.00	1.00
sigma_y	1.01	1.04
lp__	1.00	1.01

Table 38: Uinta

	Point est.	Upper C.I.
Beta[1]	1.00	1.02
Beta[2]	1.01	1.02
Beta[3]	1.02	1.06
Beta[4]	1.01	1.04
gamma[1]	1.01	1.03
gamma[2]	1.01	1.02
gamma[3]	1.00	1.00
gamma[4]	1.00	1.00
gamma[5]	1.00	1.01
gamma[6]	1.00	1.01
gamma[7]	1.00	1.02
gamma[8]	1.00	1.01
gamma[9]	1.00	1.00
gamma[10]	1.01	1.01
gamma[11]	1.00	1.00
gamma[12]	1.00	1.02
gamma[13]	1.00	1.00
gamma[14]	1.00	1.01
gamma[15]	1.00	1.00
gamma[16]	1.00	1.01
gamma[17]	1.00	1.00
gamma[18]	1.01	1.02
gamma[19]	1.00	1.01
gamma[20]	1.00	1.00
gamma[21]	1.00	1.01
gamma[22]	1.00	1.01
gamma[23]	1.00	1.00
gamma[24]	1.01	1.03
gamma[25]	1.00	1.01
gamma[26]	1.00	1.00
gamma[27]	1.01	1.02
gamma[28]	1.00	1.00
gamma[29]	1.00	1.01
gamma[30]	1.01	1.03
gamma[31]	1.00	1.01
gamma[32]	1.00	1.01
sigma_y	1.00	1.02
lp__	1.01	1.02

Table 39: Washakie

	Point est.	Upper C.I.
Beta[1]	1.00	1.00
Beta[2]	1.00	1.00
Beta[3]	1.02	1.05
Beta[4]	1.00	1.02
gamma[1]	1.00	1.01
gamma[2]	1.00	1.00
gamma[3]	1.00	1.01
gamma[4]	1.00	1.01
gamma[5]	1.00	1.01
gamma[6]	1.00	1.00
gamma[7]	1.00	1.01
gamma[8]	1.01	1.02
gamma[9]	1.01	1.03
gamma[10]	1.00	1.01
gamma[11]	1.00	1.00
gamma[12]	1.00	1.01
gamma[13]	1.01	1.01
gamma[14]	1.00	1.00
gamma[15]	1.00	1.01
gamma[16]	1.00	1.00
gamma[17]	1.00	1.02
gamma[18]	1.00	1.01
gamma[19]	1.01	1.04
gamma[20]	1.00	1.01
gamma[21]	1.00	1.00
gamma[22]	1.00	1.01
gamma[23]	1.00	1.00
gamma[24]	1.00	1.01
gamma[25]	1.00	1.00
gamma[26]	1.00	1.01
gamma[27]	1.00	1.02
gamma[28]	1.00	1.02
gamma[29]	1.00	1.00
gamma[30]	1.00	1.00
gamma[31]	1.00	1.00
gamma[32]	1.01	1.03
sigma_y	1.04	1.12
lp__	1.00	1.01

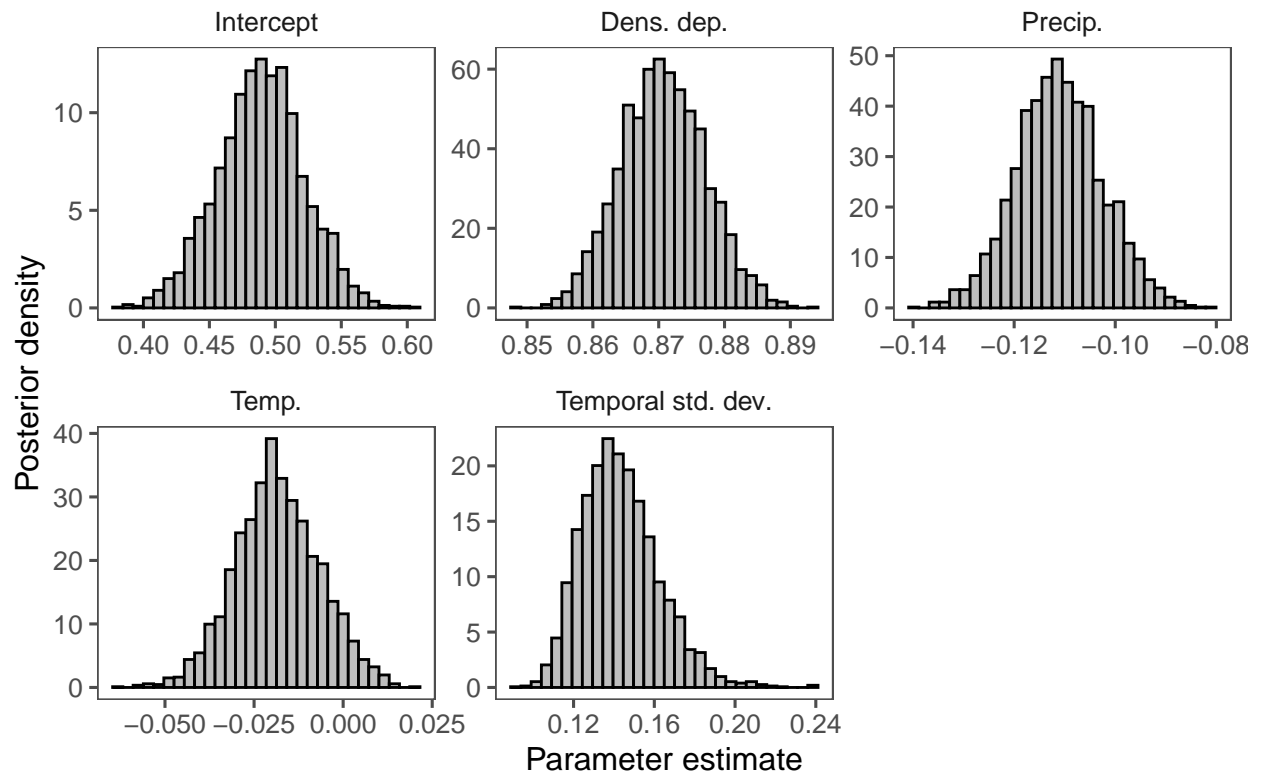
Bayesian p-values

P-value type	P-value	Core Area
SpatialDiscrep	0.71	Bear River
TemporalDiscrep	0.73	Bear River
SpatialDiscrep	0.30	Blacks Fork
TemporalDiscrep	0.64	Blacks Fork
SpatialDiscrep	0.42	Buffalo
TemporalDiscrep	0.75	Buffalo
SpatialDiscrep	0.50	Continental Divide
TemporalDiscrep	0.81	Continental Divide
SpatialDiscrep	0.20	Crowheart
TemporalDiscrep	0.81	Crowheart
SpatialDiscrep	0.34	Daniel
TemporalDiscrep	0.71	Daniel
SpatialDiscrep	0.46	Douglas
TemporalDiscrep	0.81	Douglas
SpatialDiscrep	0.30	Elk Basin East
TemporalDiscrep	0.92	Elk Basin East
SpatialDiscrep	0.91	Elk Basin West
TemporalDiscrep	0.97	Elk Basin West
SpatialDiscrep	0.30	Fontenelle
TemporalDiscrep	0.72	Fontenelle
SpatialDiscrep	0.49	Grass Creek
TemporalDiscrep	0.80	Grass Creek
SpatialDiscrep	0.35	Greater South Pass 1
TemporalDiscrep	0.74	Greater South Pass 1
SpatialDiscrep	0.22	Greater South Pass 3
TemporalDiscrep	0.81	Greater South Pass 3
SpatialDiscrep	0.19	Greater South Pass 4
TemporalDiscrep	0.81	Greater South Pass 4
SpatialDiscrep	0.68	Greater South Pass 5
TemporalDiscrep	0.85	Greater South Pass 5
SpatialDiscrep	0.10	Hanna
TemporalDiscrep	0.83	Hanna
SpatialDiscrep	0.06	Heart Mountain
TemporalDiscrep	0.66	Heart Mountain
SpatialDiscrep	0.19	Hyattville
TemporalDiscrep	0.57	Hyattville
SpatialDiscrep	0.09	Jackson
TemporalDiscrep	0.60	Jackson
SpatialDiscrep	0.13	Little Mountain
TemporalDiscrep	0.27	Little Mountain
SpatialDiscrep	0.09	Natrona 1
TemporalDiscrep	0.73	Natrona 1
SpatialDiscrep	0.22	Natrona 2
TemporalDiscrep	0.90	Natrona 2
SpatialDiscrep	0.19	Natrona 3
TemporalDiscrep	0.78	Natrona 3
SpatialDiscrep	0.66	Newcastle
TemporalDiscrep	0.68	Newcastle
SpatialDiscrep	0.25	North Gillette
TemporalDiscrep	0.65	North Gillette

P-value type	P-value	Core Area
SpatialDiscrep	0.55	North Glenrock
TemporalDiscrep	0.62	North Glenrock
SpatialDiscrep	0.73	North Laramie
TemporalDiscrep	0.76	North Laramie
SpatialDiscrep	0.12	Oregon Basin
TemporalDiscrep	0.71	Oregon Basin
SpatialDiscrep	0.04	Powder
TemporalDiscrep	0.05	Powder
SpatialDiscrep	0.00	Sage
TemporalDiscrep	0.54	Sage
SpatialDiscrep	0.07	Salt Wells
TemporalDiscrep	0.71	Salt Wells
SpatialDiscrep	0.02	Seedskadee
TemporalDiscrep	0.26	Seedskadee
SpatialDiscrep	0.06	Shell
TemporalDiscrep	0.79	Shell
SpatialDiscrep	0.09	South Rawlins
TemporalDiscrep	0.73	South Rawlins
SpatialDiscrep	0.59	Thermopolis
TemporalDiscrep	0.65	Thermopolis
SpatialDiscrep	0.19	Thunder Basin
TemporalDiscrep	0.69	Thunder Basin
SpatialDiscrep	0.34	Washakie
TemporalDiscrep	0.64	Washakie
SpatialDiscrep	0.25	Greater South Pass 2
TemporalDiscrep	0.76	Greater South Pass 2
SpatialDiscrep	0.02	Uinta
TemporalDiscrep	0.49	Uinta

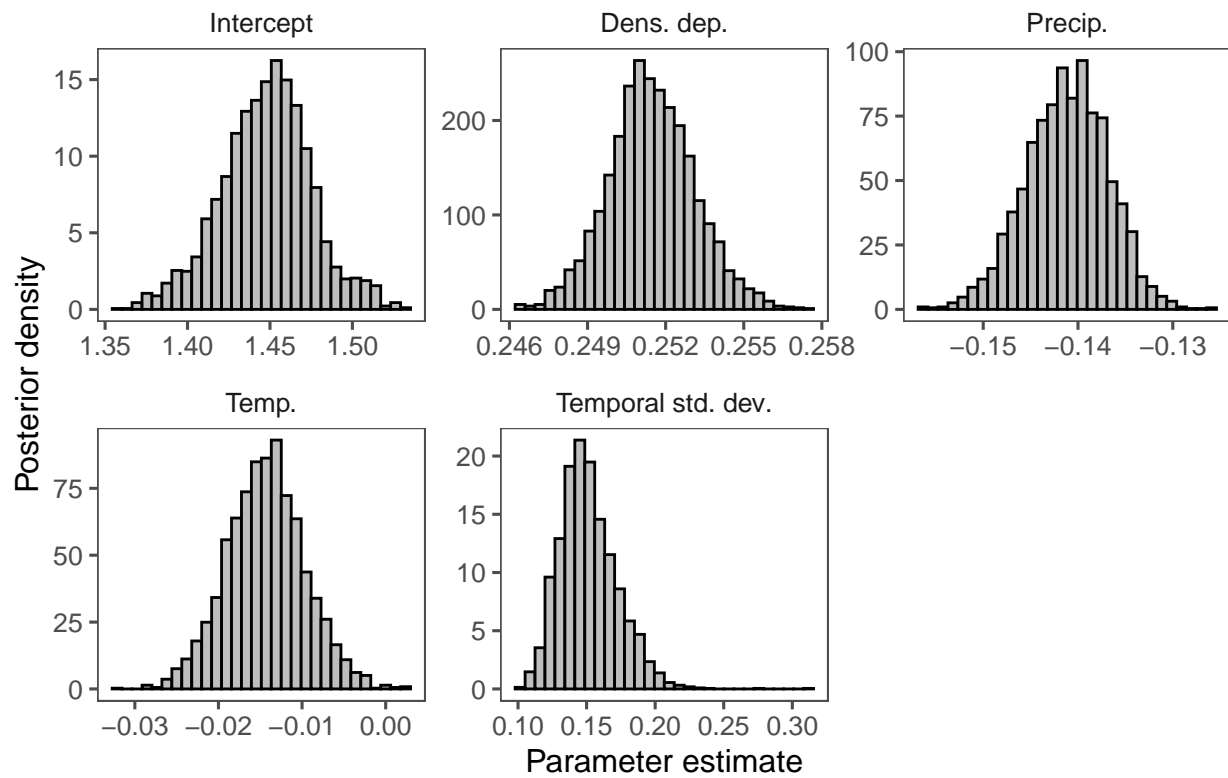
Posterior distributions

BearRiver



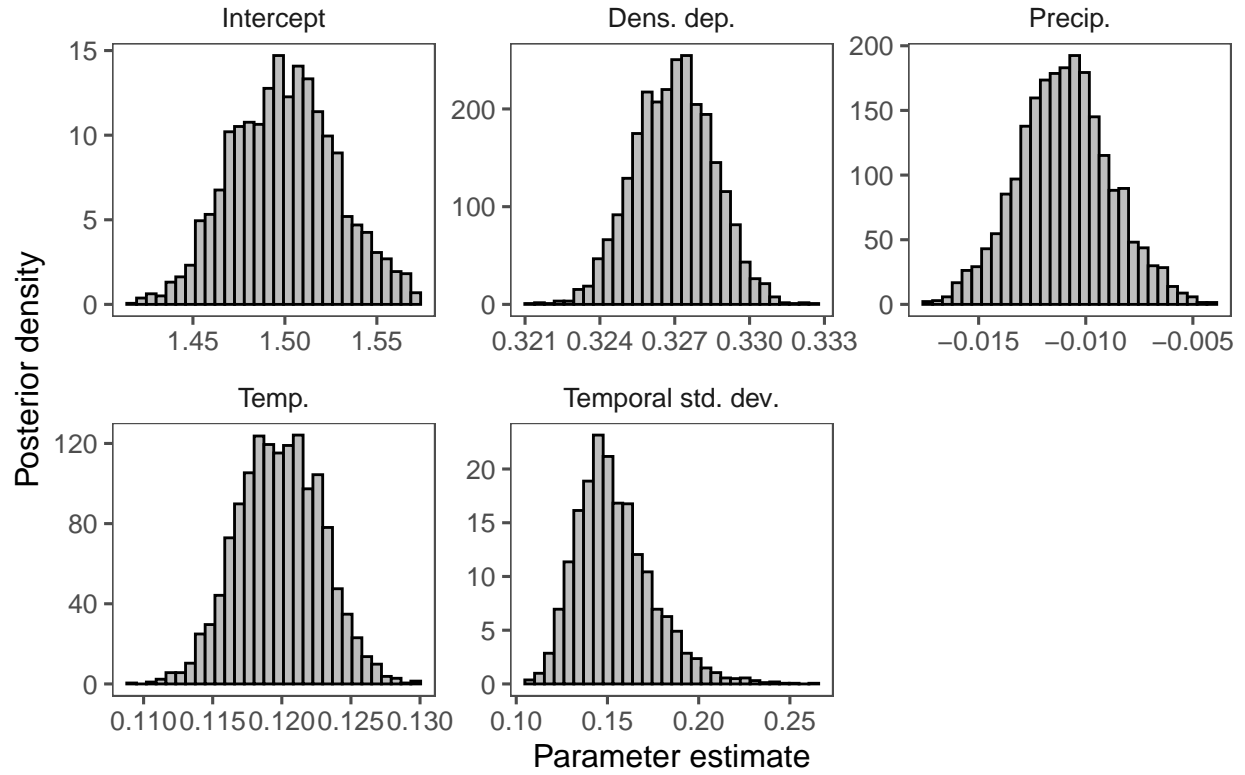
	Mean	Median	SD	2.5%	97.5%
Intercept, β_1	0.49	0.49	0.03	0.42	0.55
Density dependence, β_2	0.87	0.87	0.01	0.86	0.88
Precipitation effect, β_3	-0.11	-0.11	0.01	-0.13	-0.09
Temperature effect, β_4	-0.02	-0.02	0.01	-0.04	0.01
Std. dev. of temporal random effect, σ_y	0.14	0.14	0.02	0.11	0.18

BlacksFork



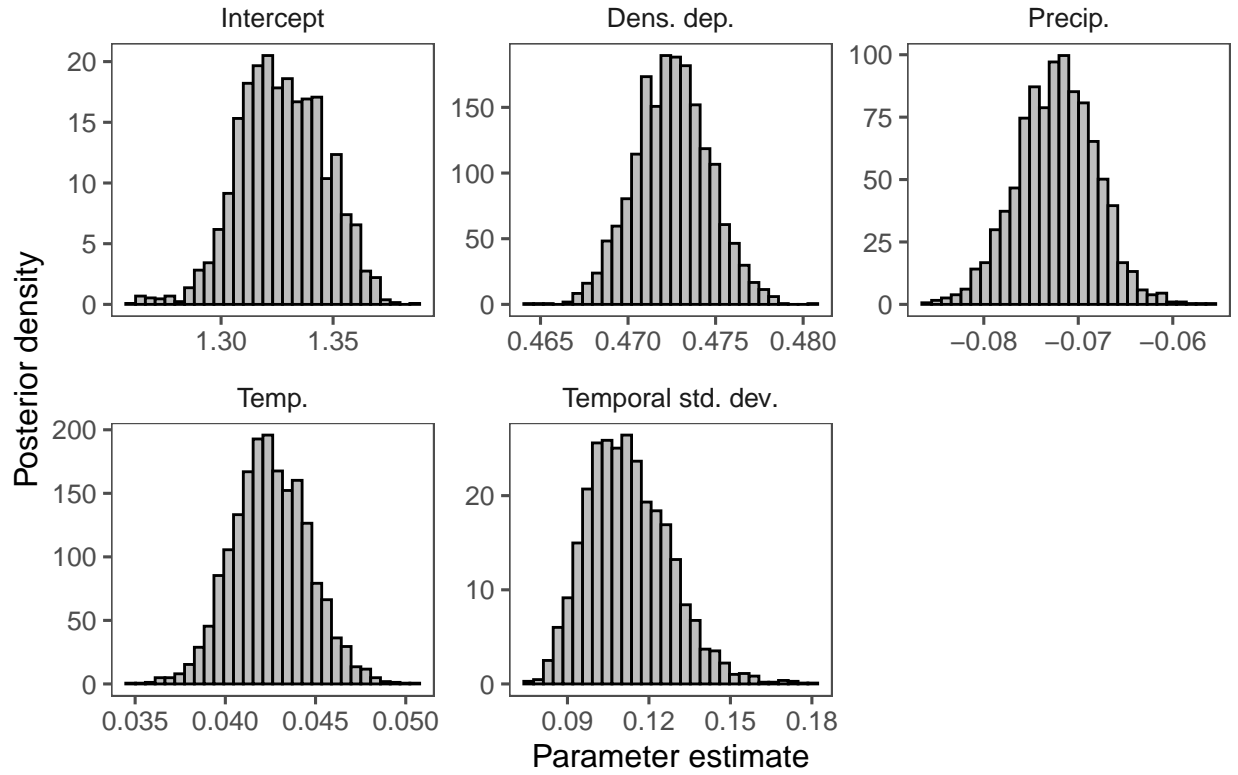
	Mean	Median	SD	2.5%	97.5%
Intercept, β_1	1.45	1.45	0.03	1.39	1.51
Density dependence, β_2	0.25	0.25	0.00	0.25	0.25
Precipitation effect, β_3	-0.14	-0.14	0.00	-0.15	-0.13
Temperature effect, β_4	-0.01	-0.01	0.00	-0.02	0.00
Std. dev. of temporal random effect, σ_y	0.15	0.15	0.02	0.12	0.20

Buffalo



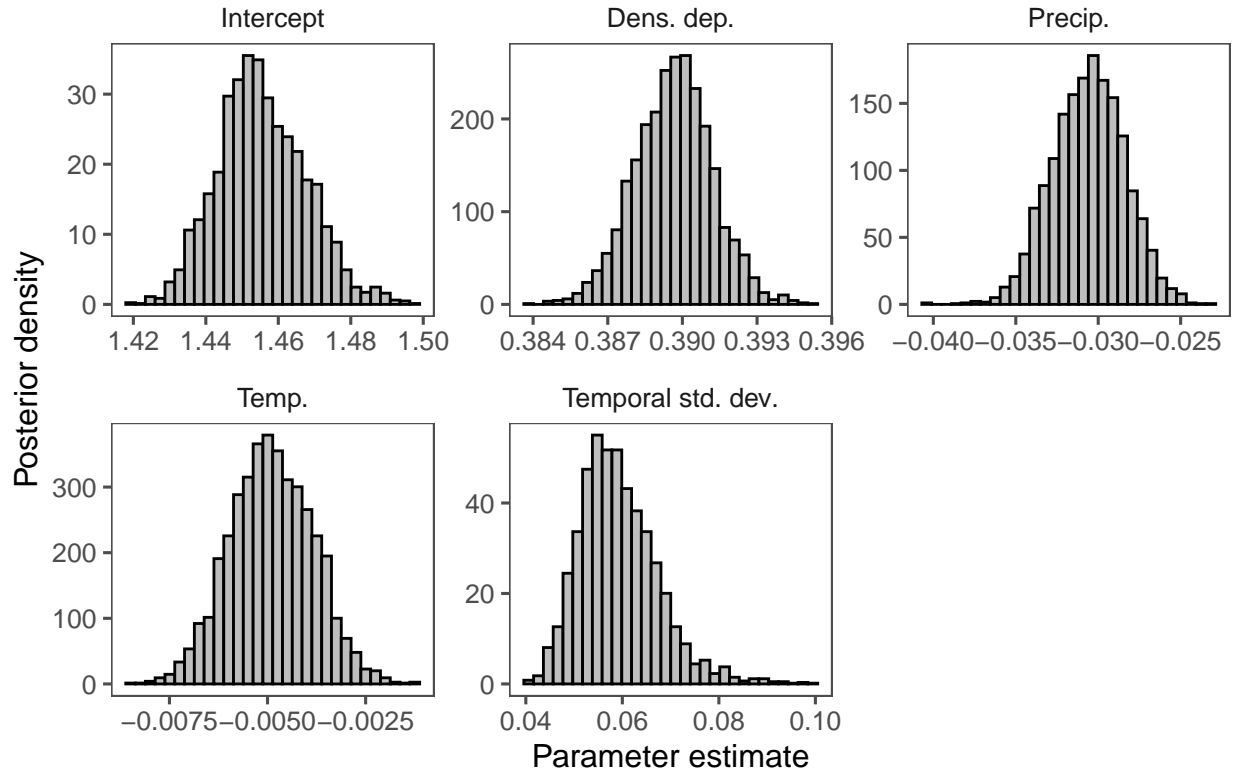
	Mean	Median	SD	2.5%	97.5%
Intercept, β_1	1.50	1.50	0.03	1.45	1.56
Density dependence, β_2	0.33	0.33	0.00	0.32	0.33
Precipitation effect, β_3	-0.01	-0.01	0.00	-0.02	-0.01
Temperature effect, β_4	0.12	0.12	0.00	0.11	0.13
Std. dev. of temporal random effect, σ_y	0.15	0.15	0.02	0.12	0.20

ContinentalDivide



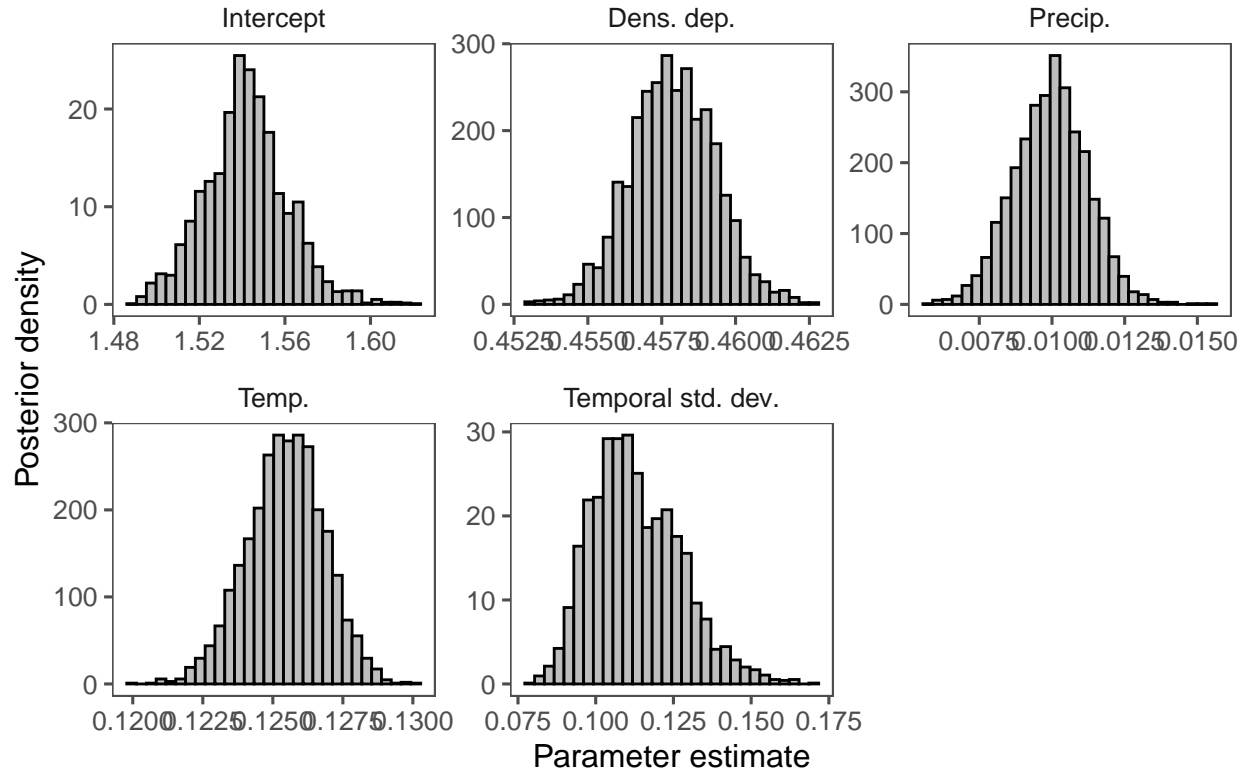
	Mean	Median	SD	2.5%	97.5%
Intercept, β_1	1.33	1.33	0.02	1.29	1.36
Density dependence, β_2	0.47	0.47	0.00	0.47	0.48
Precipitation effect, β_3	-0.07	-0.07	0.00	-0.08	-0.06
Temperature effect, β_4	0.04	0.04	0.00	0.04	0.05
Std. dev. of temporal random effect, σ_y	0.11	0.11	0.02	0.09	0.15

Crowheart



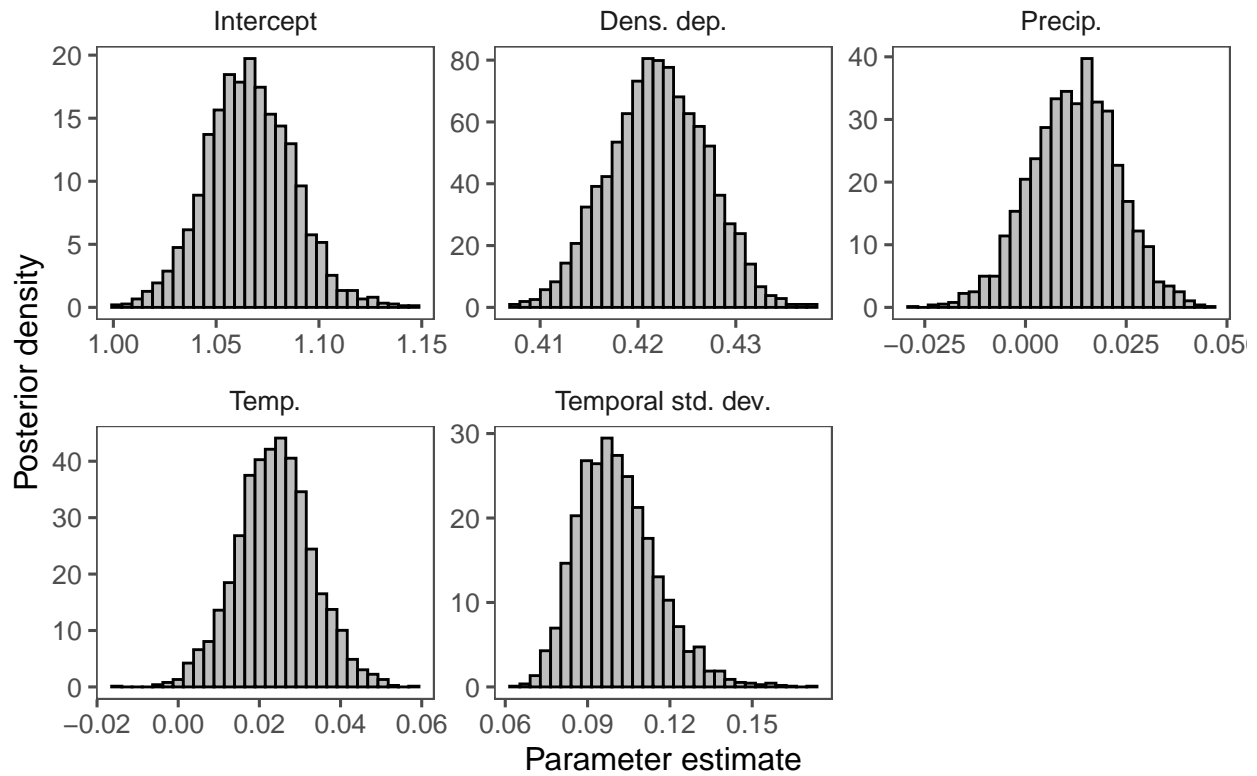
	Mean	Median	SD	2.5%	97.5%
Intercept, β_1	1.46	1.45	0.01	1.43	1.48
Density dependence, β_2	0.39	0.39	0.00	0.39	0.39
Precipitation effect, β_3	-0.03	-0.03	0.00	-0.03	-0.03
Temperature effect, β_4	0.00	0.00	0.00	-0.01	0.00
Std. dev. of temporal random effect, σ_y	0.06	0.06	0.01	0.05	0.08

Daniel



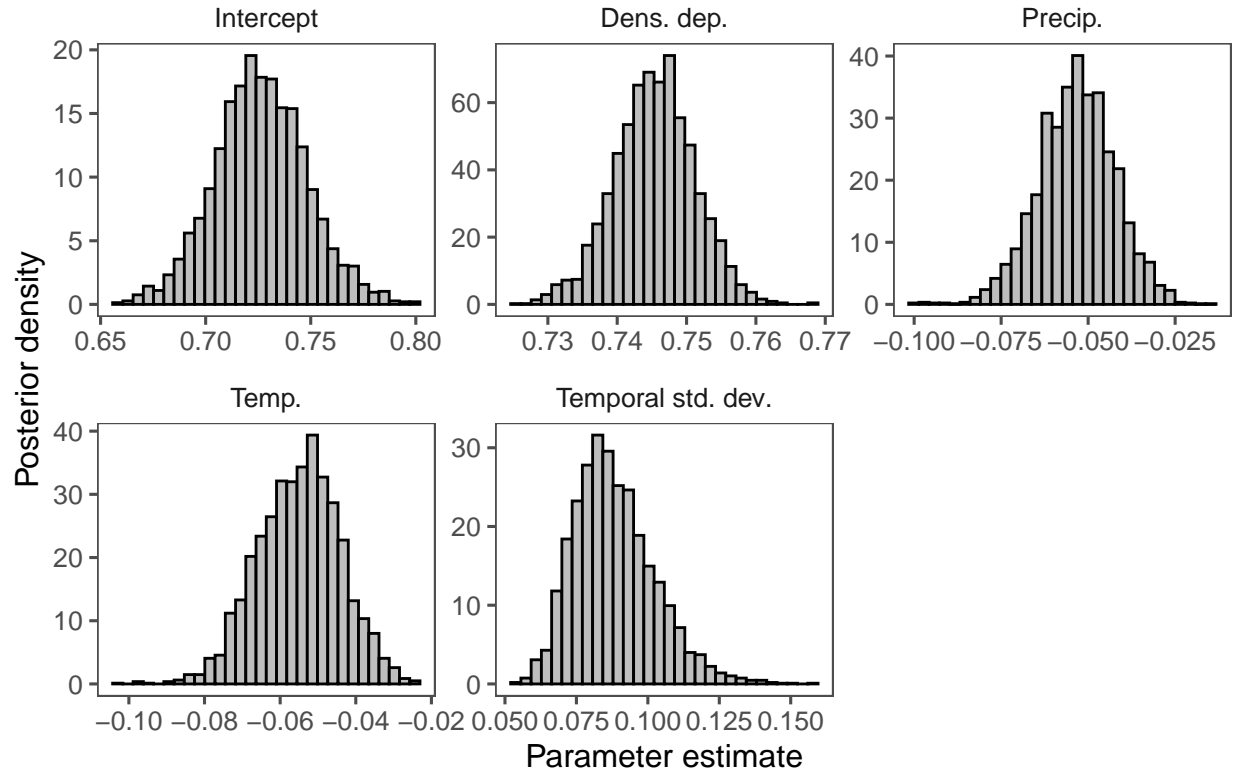
	Mean	Median	SD	2.5%	97.5%
Intercept, β_1	1.54	1.54	0.02	1.50	1.58
Density dependence, β_2	0.46	0.46	0.00	0.46	0.46
Precipitation effect, β_3	0.01	0.01	0.00	0.01	0.01
Temperature effect, β_4	0.13	0.13	0.00	0.12	0.13
Std. dev. of temporal random effect, σ_y	0.11	0.11	0.01	0.09	0.14

Douglas



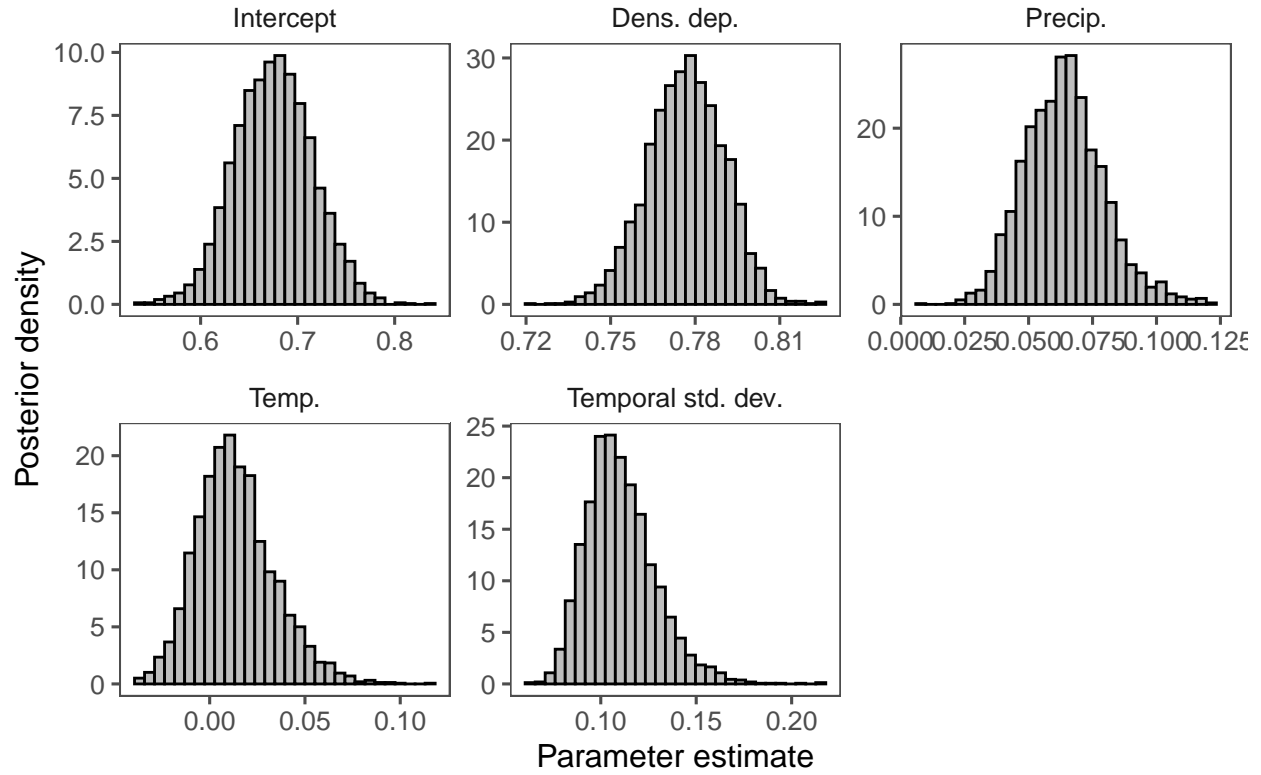
	Mean	Median	SD	2.5%	97.5%
Intercept, β_1	1.07	1.07	0.02	1.03	1.11
Density dependence, β_2	0.42	0.42	0.00	0.41	0.43
Precipitation effect, β_3	0.01	0.01	0.01	-0.01	0.03
Temperature effect, β_4	0.02	0.02	0.01	0.01	0.04
Std. dev. of temporal random effect, σ_y	0.10	0.10	0.01	0.08	0.13

ElkBasinEast



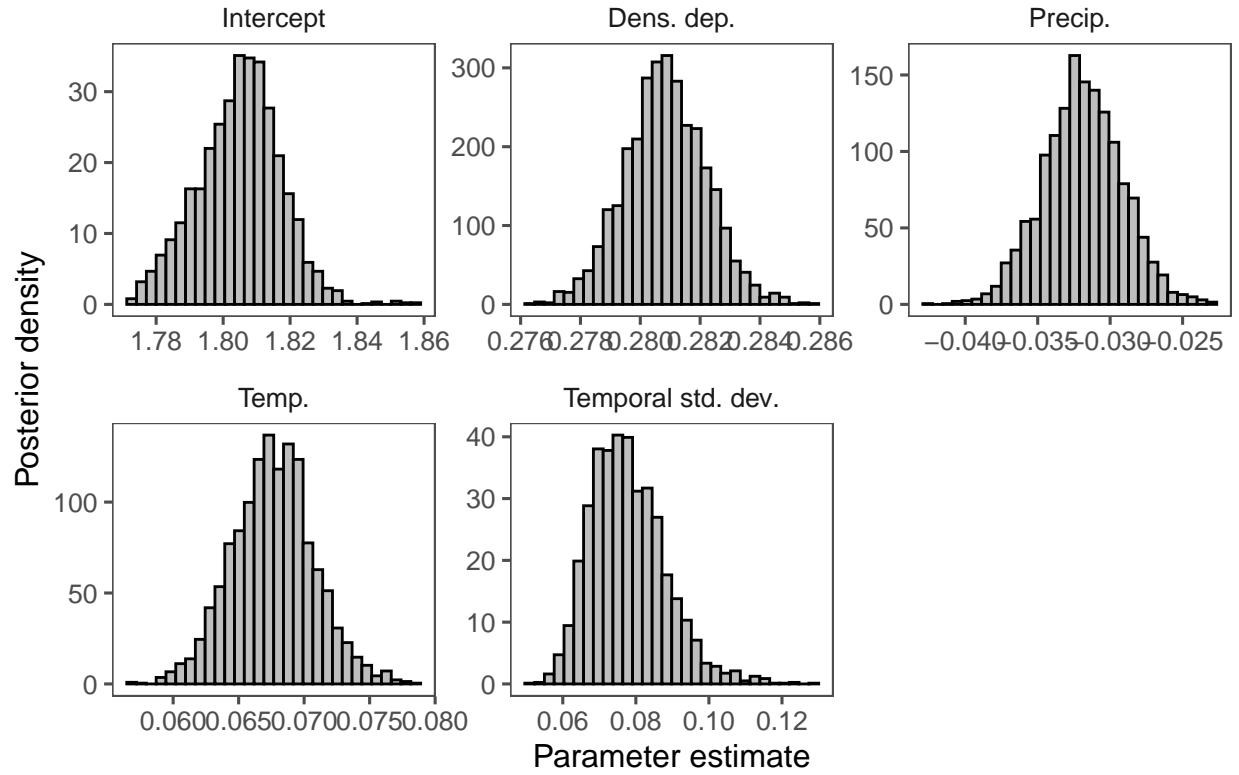
	Mean	Median	SD	2.5%	97.5%
Intercept, β_1	0.73	0.73	0.02	0.68	0.77
Density dependence, β_2	0.75	0.75	0.01	0.73	0.76
Precipitation effect, β_3	-0.05	-0.05	0.01	-0.08	-0.03
Temperature effect, β_4	-0.06	-0.05	0.01	-0.08	-0.03
Std. dev. of temporal random effect, σ_y	0.09	0.09	0.01	0.07	0.12

ElkBasinWest



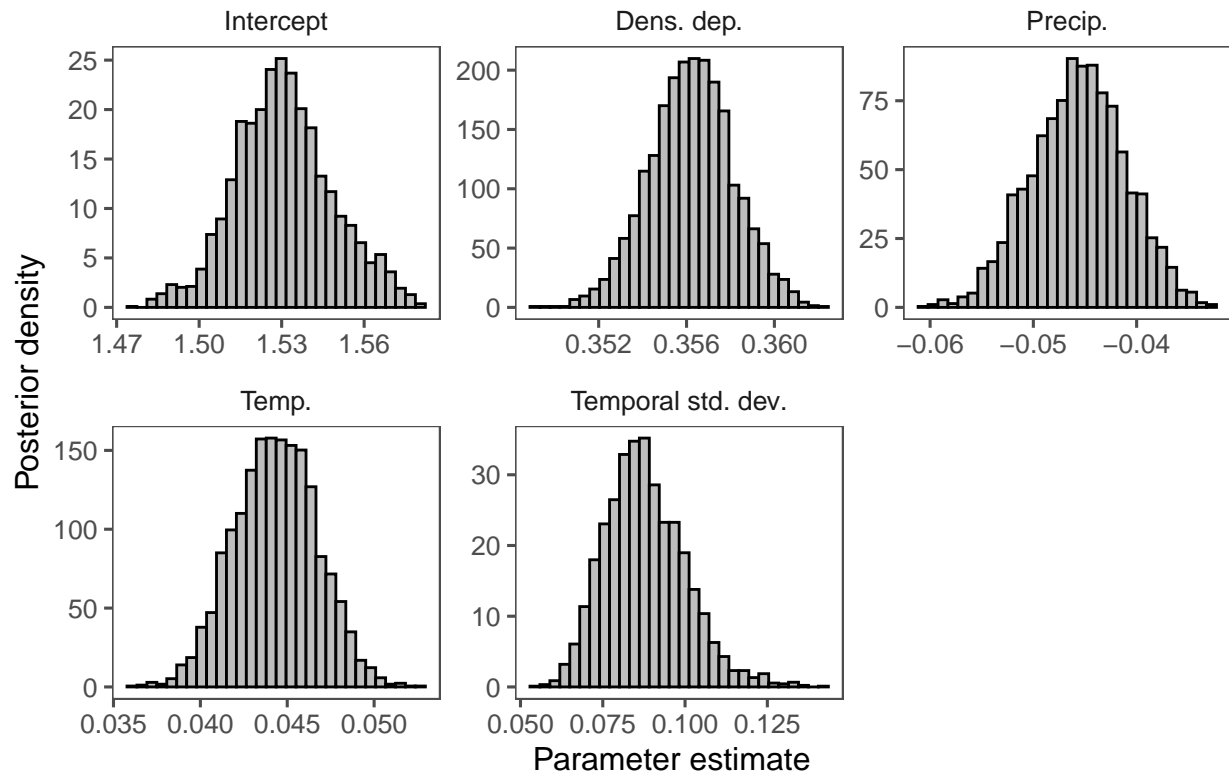
	Mean	Median	SD	2.5%	97.5%
Intercept, β_1	0.68	0.68	0.04	0.60	0.75
Density dependence, β_2	0.78	0.78	0.01	0.75	0.80
Precipitation effect, β_3	0.06	0.06	0.02	0.04	0.10
Temperature effect, β_4	0.01	0.01	0.02	-0.02	0.06
Std. dev. of temporal random effect, σ_y	0.11	0.11	0.02	0.08	0.15

Fontenelle



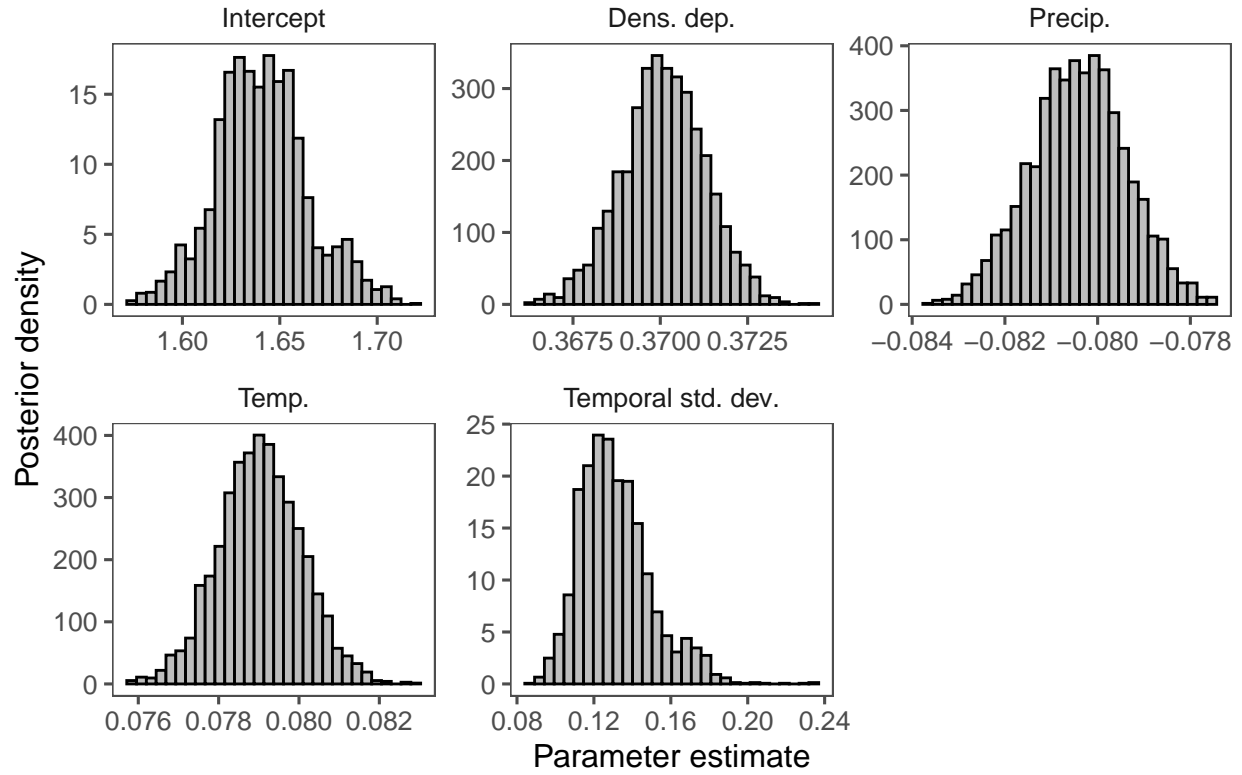
	Mean	Median	SD	2.5%	97.5%
Intercept, β_1	1.80	1.81	0.01	1.78	1.83
Density dependence, β_2	0.28	0.28	0.00	0.28	0.28
Precipitation effect, β_3	-0.03	-0.03	0.00	-0.04	-0.03
Temperature effect, β_4	0.07	0.07	0.00	0.06	0.07
Std. dev. of temporal random effect, σ_y	0.08	0.08	0.01	0.06	0.10

GrassCreek



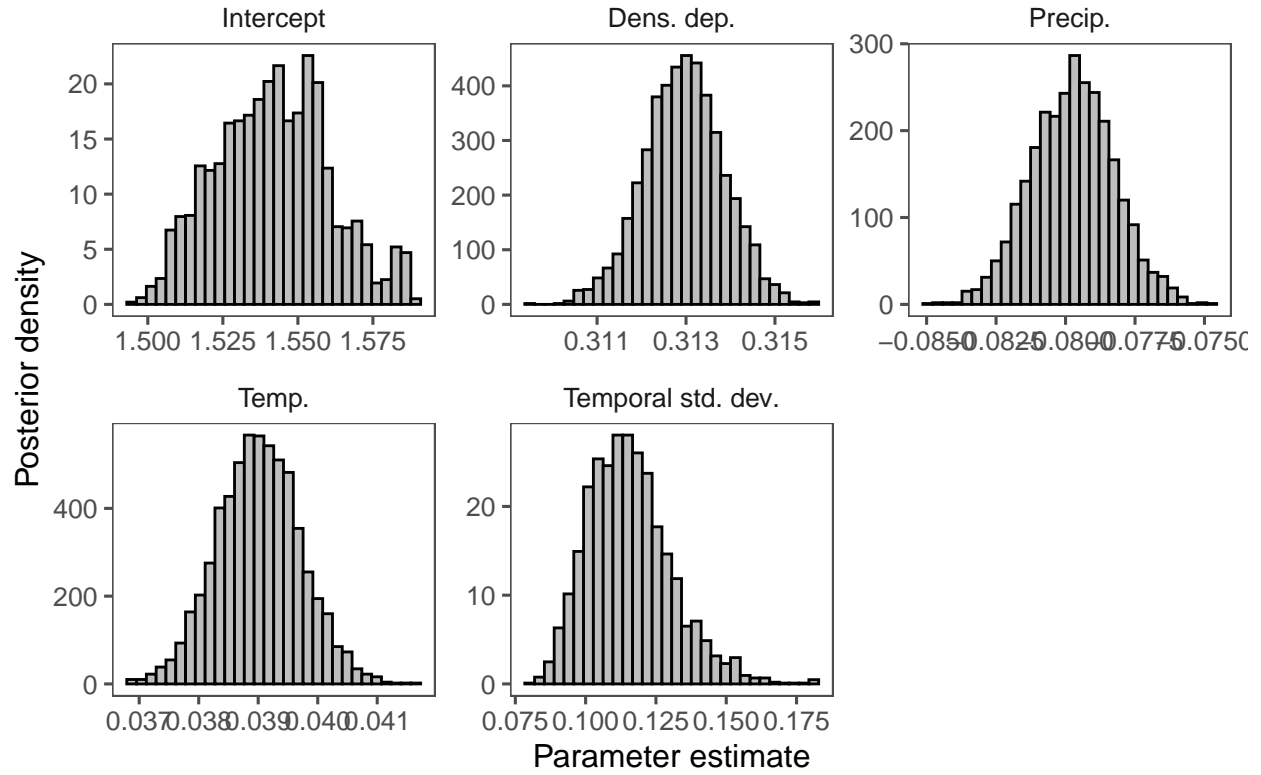
	Mean	Median	SD	2.5%	97.5%
Intercept, β_1	1.53	1.53	0.02	1.50	1.57
Density dependence, β_2	0.36	0.36	0.00	0.35	0.36
Precipitation effect, β_3	-0.05	-0.05	0.00	-0.05	-0.04
Temperature effect, β_4	0.04	0.04	0.00	0.04	0.05
Std. dev. of temporal random effect, σ_y	0.09	0.09	0.01	0.07	0.12

GreaterSouthPass1



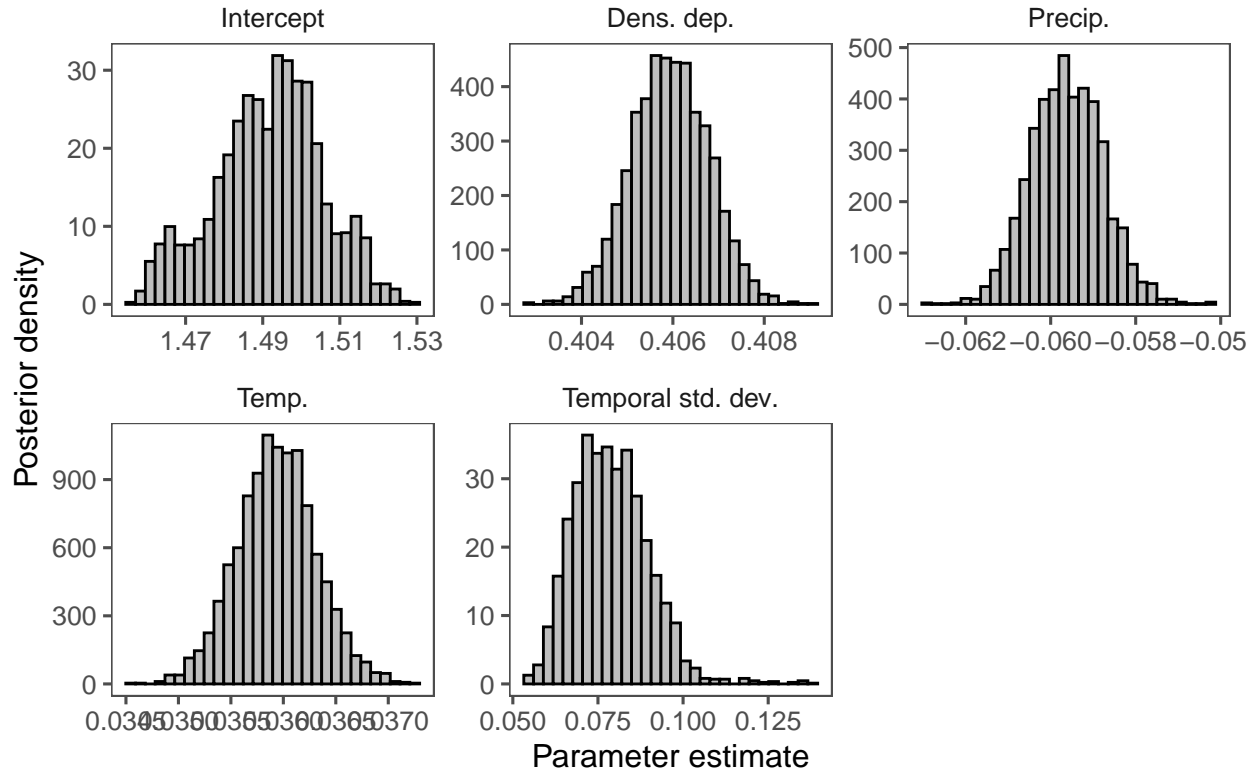
	Mean	Median	SD	2.5%	97.5%
Intercept, β_1	1.64	1.64	0.02	1.60	1.69
Density dependence, β_2	0.37	0.37	0.00	0.37	0.37
Precipitation effect, β_3	-0.08	-0.08	0.00	-0.08	-0.08
Temperature effect, β_4	0.08	0.08	0.00	0.08	0.08
Std. dev. of temporal random effect, σ_y	0.13	0.13	0.02	0.10	0.18

GreaterSouthPass2



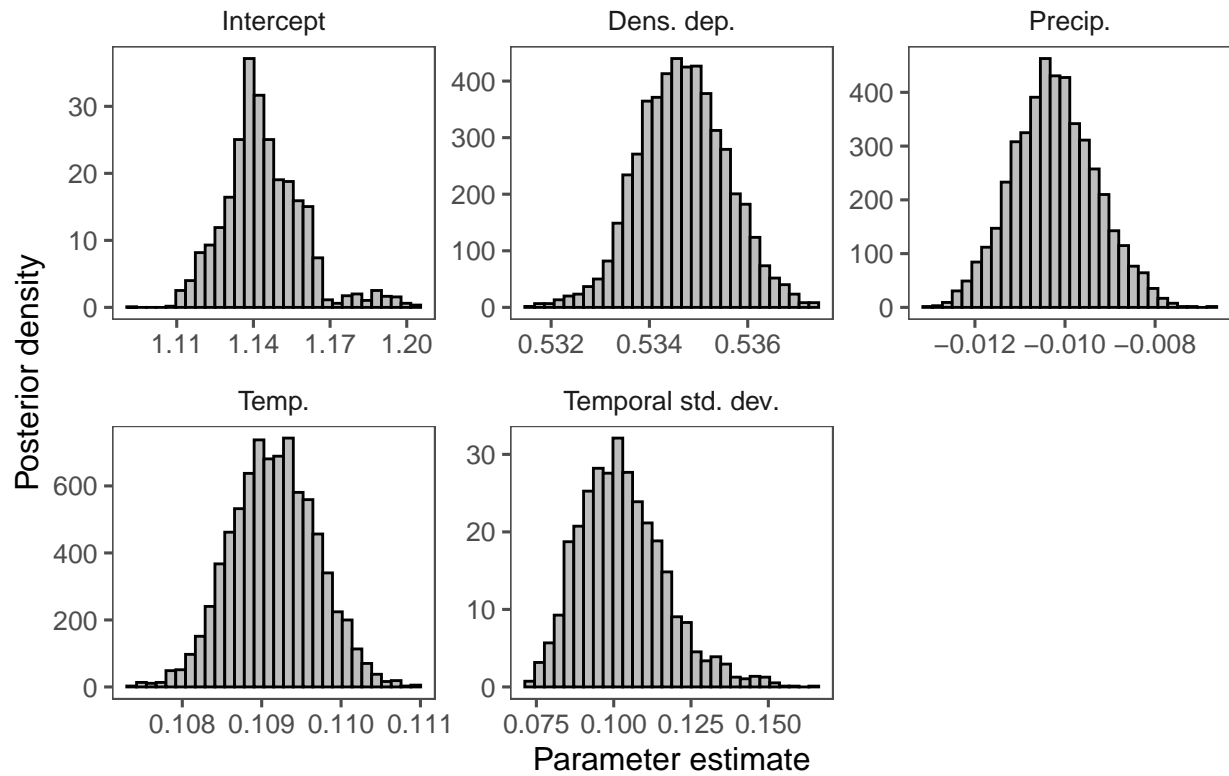
	Mean	Median	SD	2.5%	97.5%
Intercept, β_1	1.54	1.54	0.02	1.51	1.58
Density dependence, β_2	0.31	0.31	0.00	0.31	0.31
Precipitation effect, β_3	-0.08	-0.08	0.00	-0.08	-0.08
Temperature effect, β_4	0.04	0.04	0.00	0.04	0.04
Std. dev. of temporal random effect, σ_y	0.12	0.11	0.01	0.09	0.15

GreaterSouthPass3



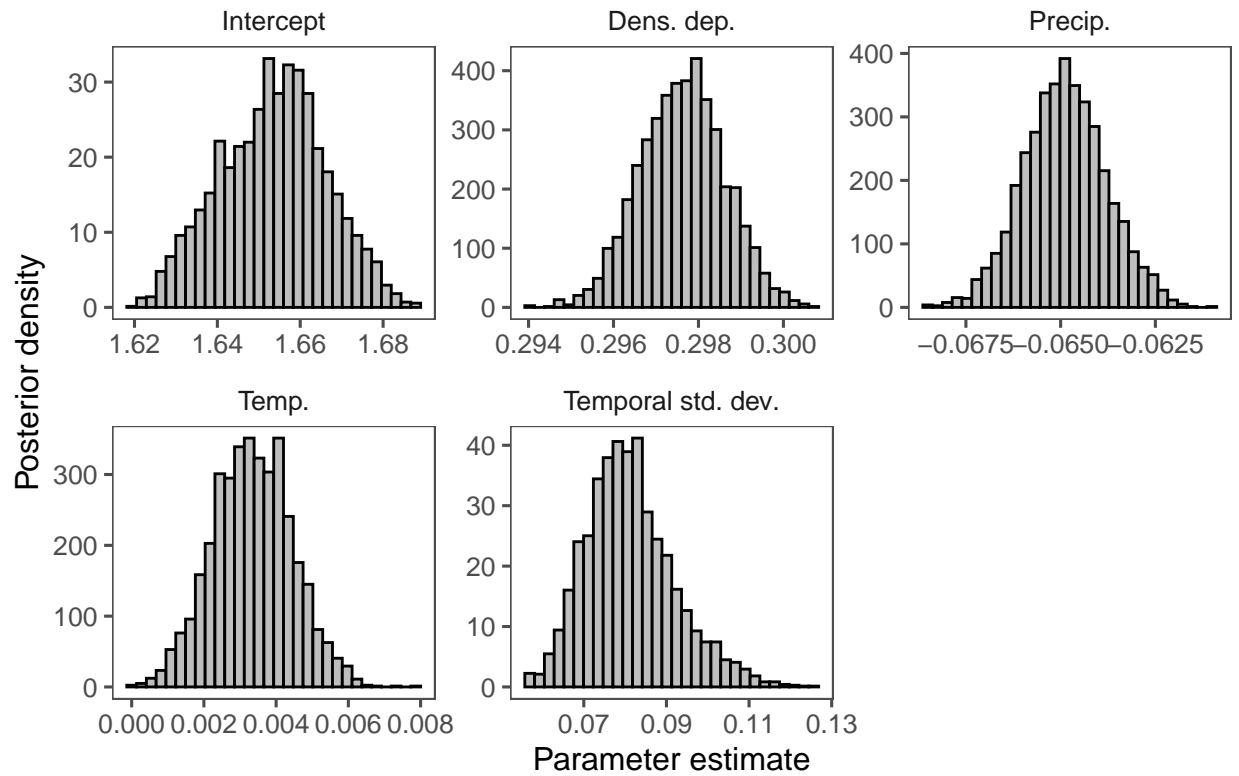
	Mean	Median	SD	2.5%	97.5%
Intercept, β_1	1.49	1.49	0.01	1.46	1.52
Density dependence, β_2	0.41	0.41	0.00	0.40	0.41
Precipitation effect, β_3	-0.06	-0.06	0.00	-0.06	-0.06
Temperature effect, β_4	0.04	0.04	0.00	0.04	0.04
Std. dev. of temporal random effect, σ_y	0.08	0.08	0.01	0.06	0.10

GreaterSouthPass4



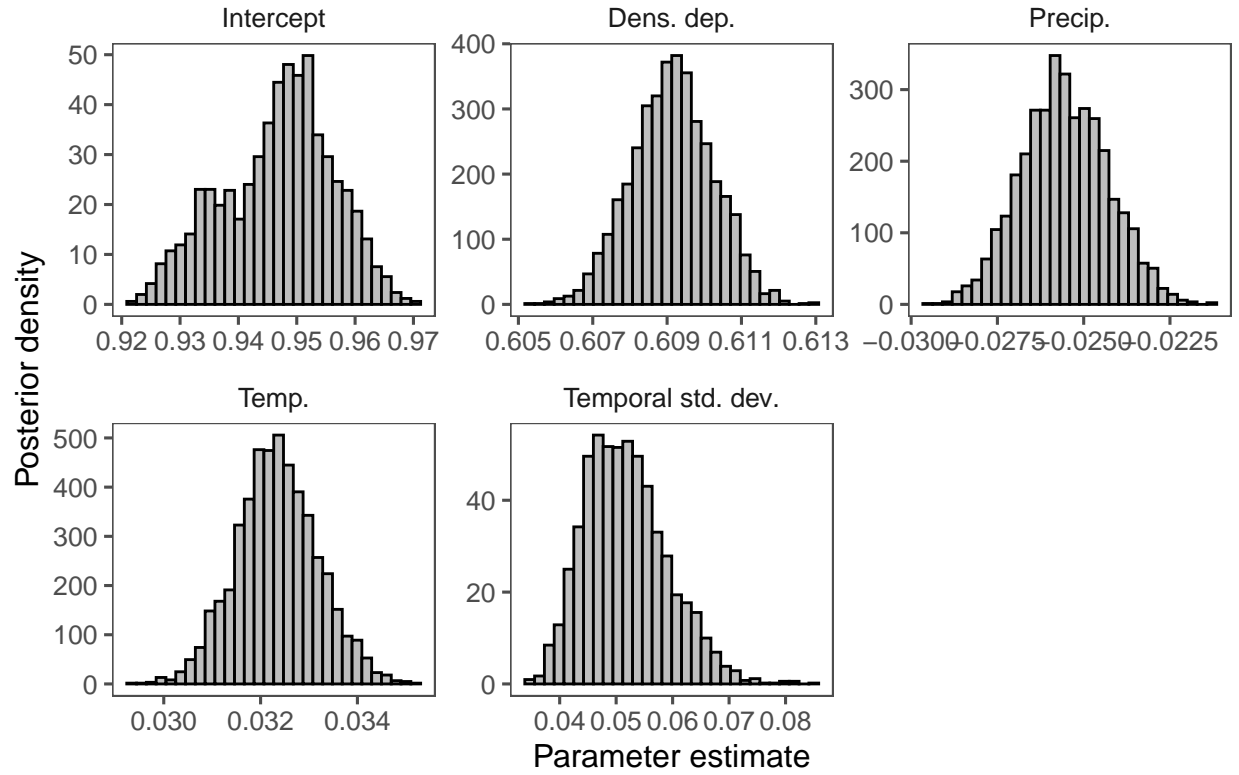
	Mean	Median	SD	2.5%	97.5%
Intercept, β_1	1.14	1.14	0.02	1.12	1.19
Density dependence, β_2	0.53	0.53	0.00	0.53	0.54
Precipitation effect, β_3	-0.01	-0.01	0.00	-0.01	-0.01
Temperature effect, β_4	0.11	0.11	0.00	0.11	0.11
Std. dev. of temporal random effect, σ_y	0.10	0.10	0.01	0.08	0.14

GreaterSouthPass5



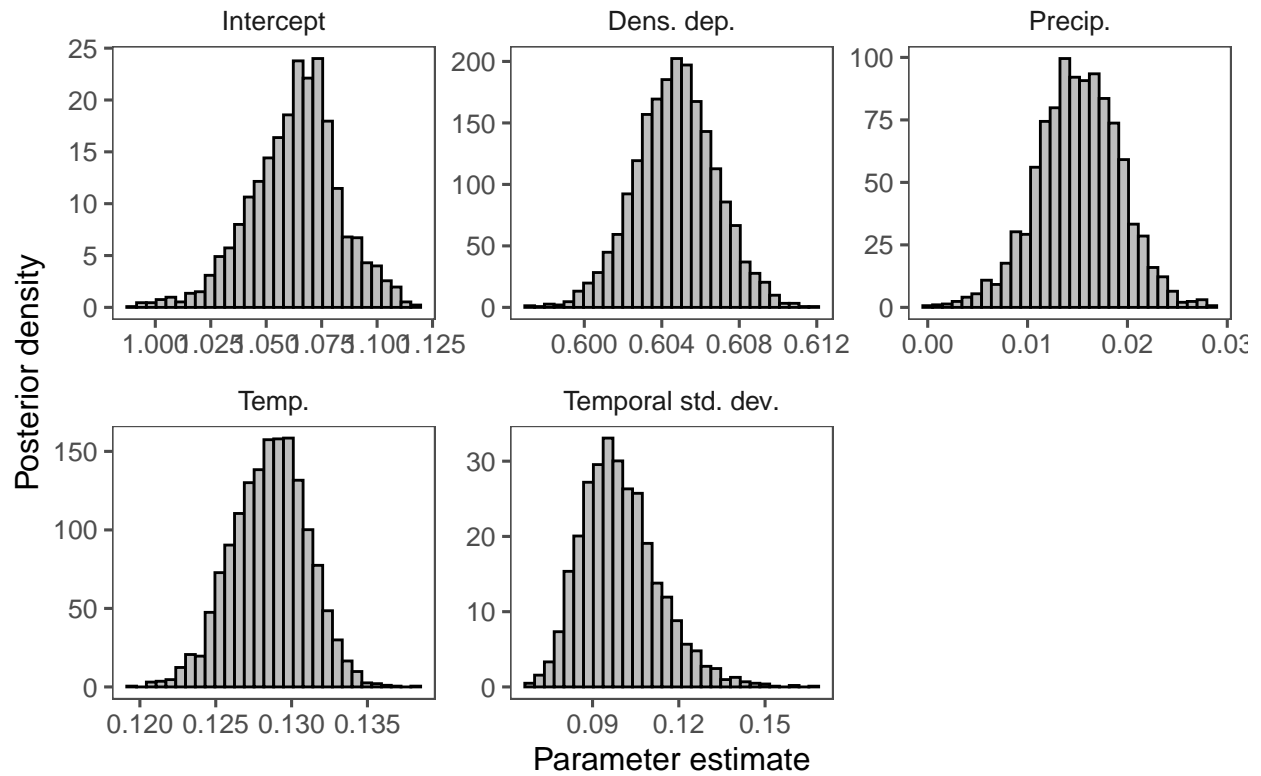
	Mean	Median	SD	2.5%	97.5%
Intercept, β_1	1.65	1.65	0.01	1.63	1.68
Density dependence, β_2	0.30	0.30	0.00	0.30	0.30
Precipitation effect, β_3	-0.06	-0.06	0.00	-0.07	-0.06
Temperature effect, β_4	0.00	0.00	0.00	0.00	0.01
Std. dev. of temporal random effect, σ_y	0.08	0.08	0.01	0.06	0.11

Hanna



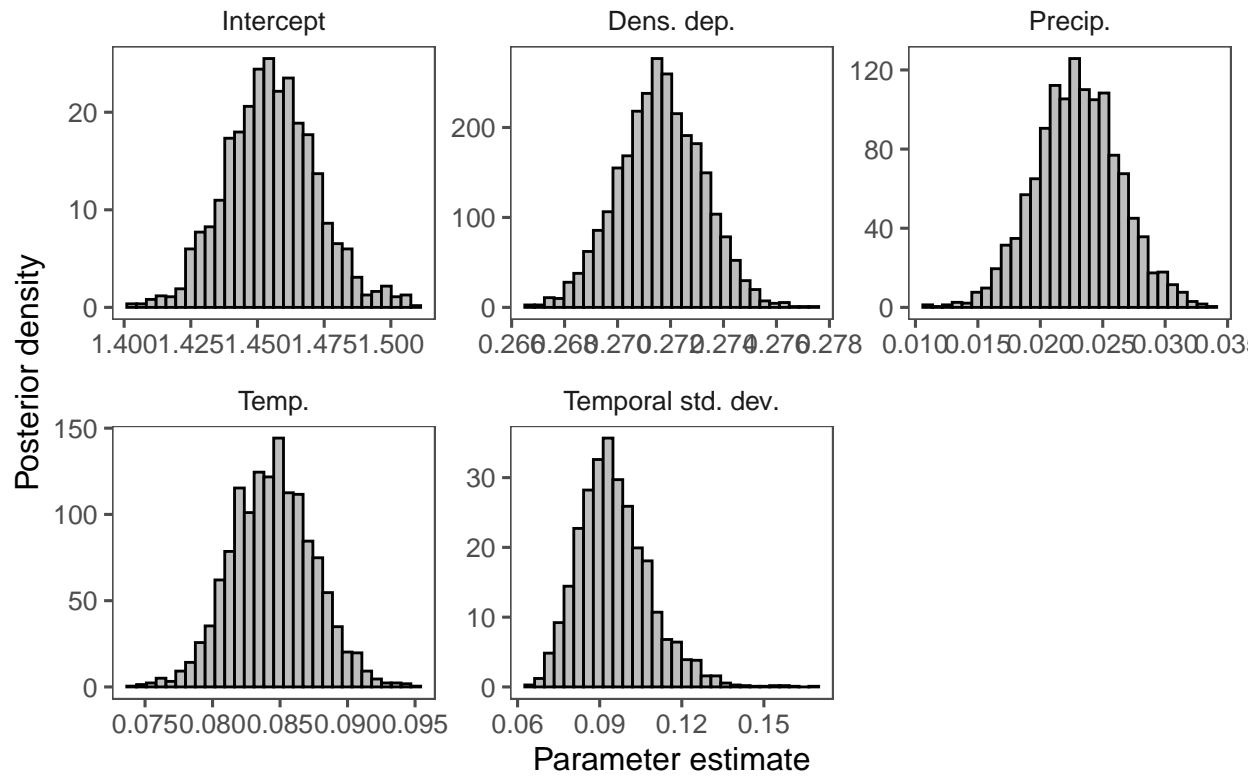
	Mean	Median	SD	2.5%	97.5%
Intercept, β_1	0.95	0.95	0.01	0.93	0.96
Density dependence, β_2	0.61	0.61	0.00	0.61	0.61
Precipitation effect, β_3	-0.03	-0.03	0.00	-0.03	-0.02
Temperature effect, β_4	0.03	0.03	0.00	0.03	0.03
Std. dev. of temporal random effect, σ_y	0.05	0.05	0.01	0.04	0.07

HeartMountain



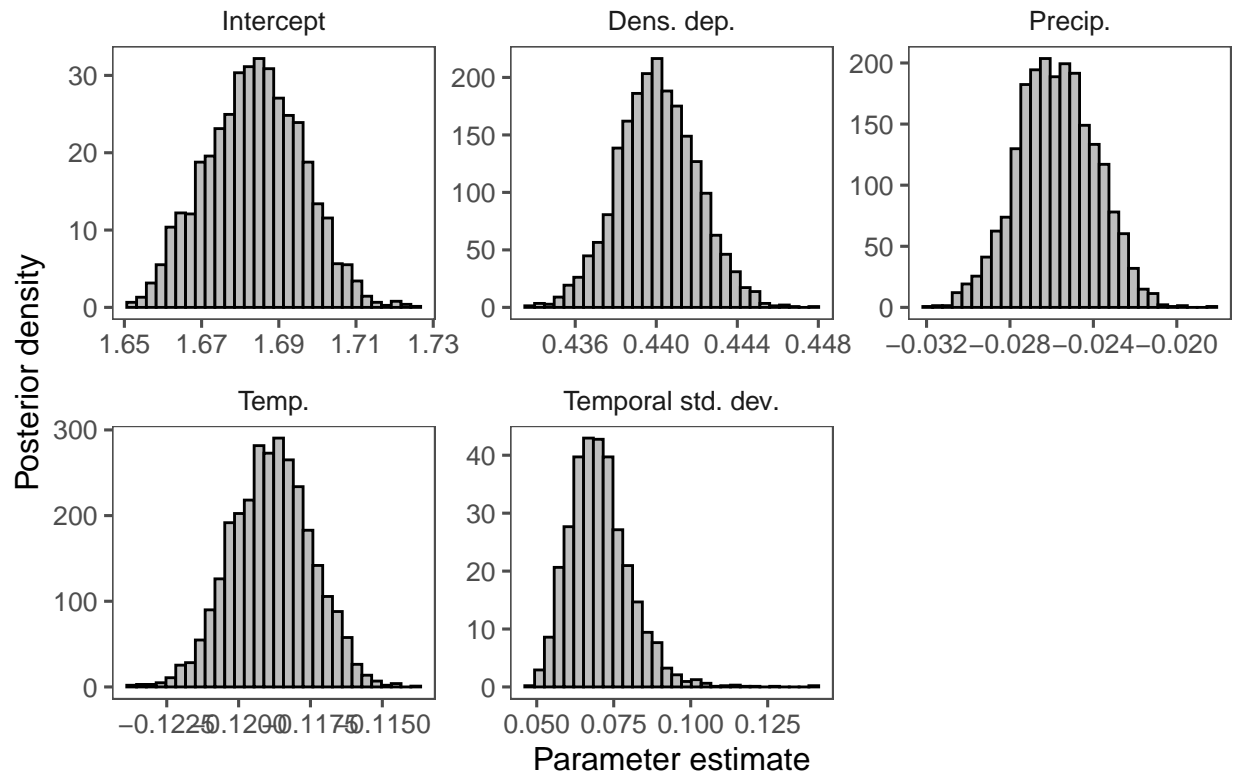
	Mean	Median	SD	2.5%	97.5%
Intercept, β_1	1.06	1.06	0.02	1.02	1.10
Density dependence, β_2	0.60	0.60	0.00	0.60	0.61
Precipitation effect, β_3	0.02	0.02	0.00	0.01	0.02
Temperature effect, β_4	0.13	0.13	0.00	0.12	0.13
Std. dev. of temporal random effect, σ_y	0.10	0.10	0.01	0.08	0.13

Hyattville



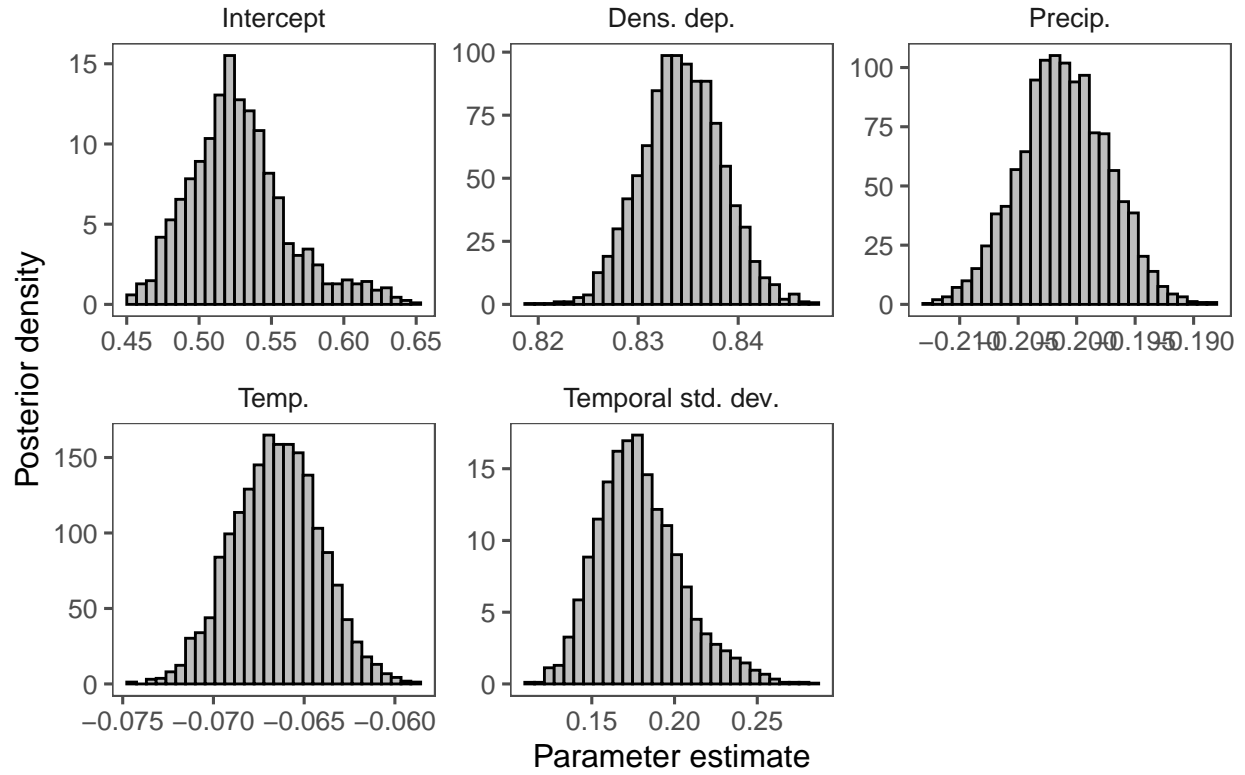
	Mean	Median	SD	2.5%	97.5%
Intercept, β_1	1.46	1.45	0.02	1.42	1.49
Density dependence, β_2	0.27	0.27	0.00	0.27	0.27
Precipitation effect, β_3	0.02	0.02	0.00	0.02	0.03
Temperature effect, β_4	0.08	0.08	0.00	0.08	0.09
Std. dev. of temporal random effect, σ_y	0.10	0.09	0.01	0.07	0.12

Jackson



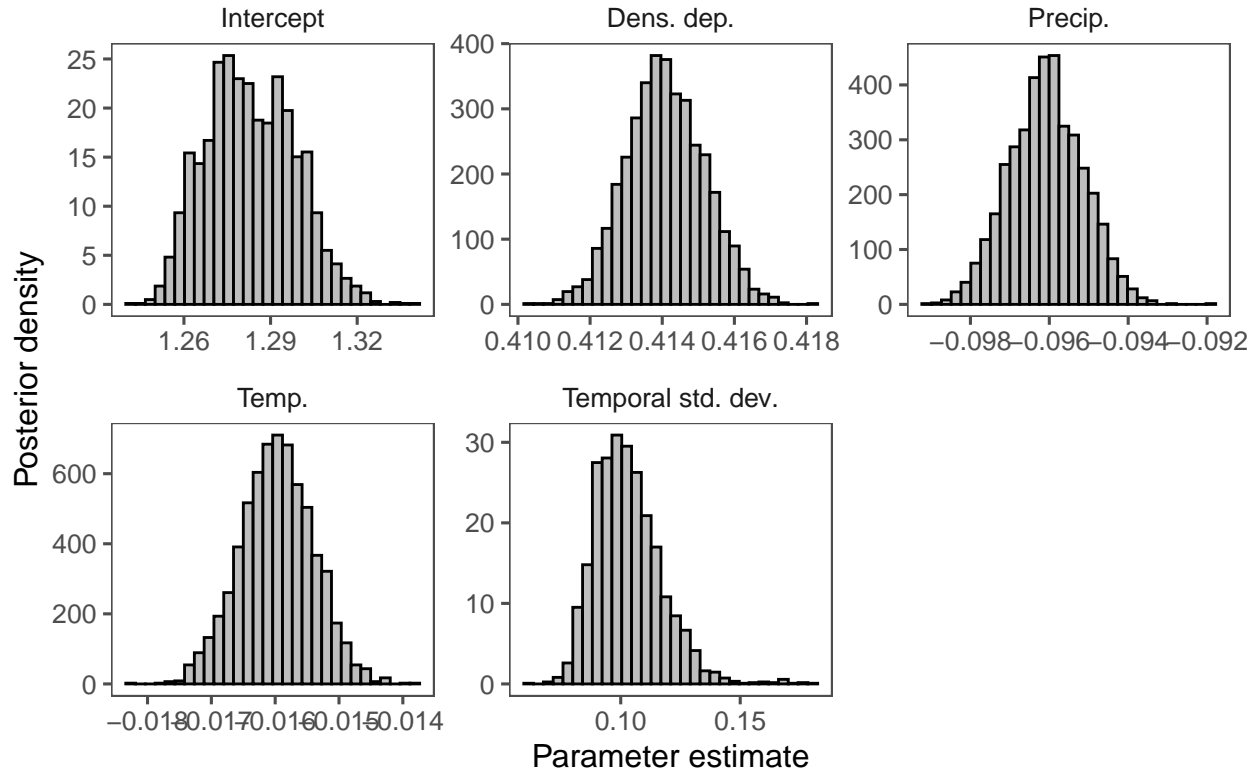
	Mean	Median	SD	2.5%	97.5%
Intercept, β_1	1.68	1.68	0.01	1.66	1.71
Density dependence, β_2	0.44	0.44	0.00	0.44	0.44
Precipitation effect, β_3	-0.03	-0.03	0.00	-0.03	-0.02
Temperature effect, β_4	-0.12	-0.12	0.00	-0.12	-0.12
Std. dev. of temporal random effect, σ_y	0.07	0.07	0.01	0.05	0.09

LittleMountain



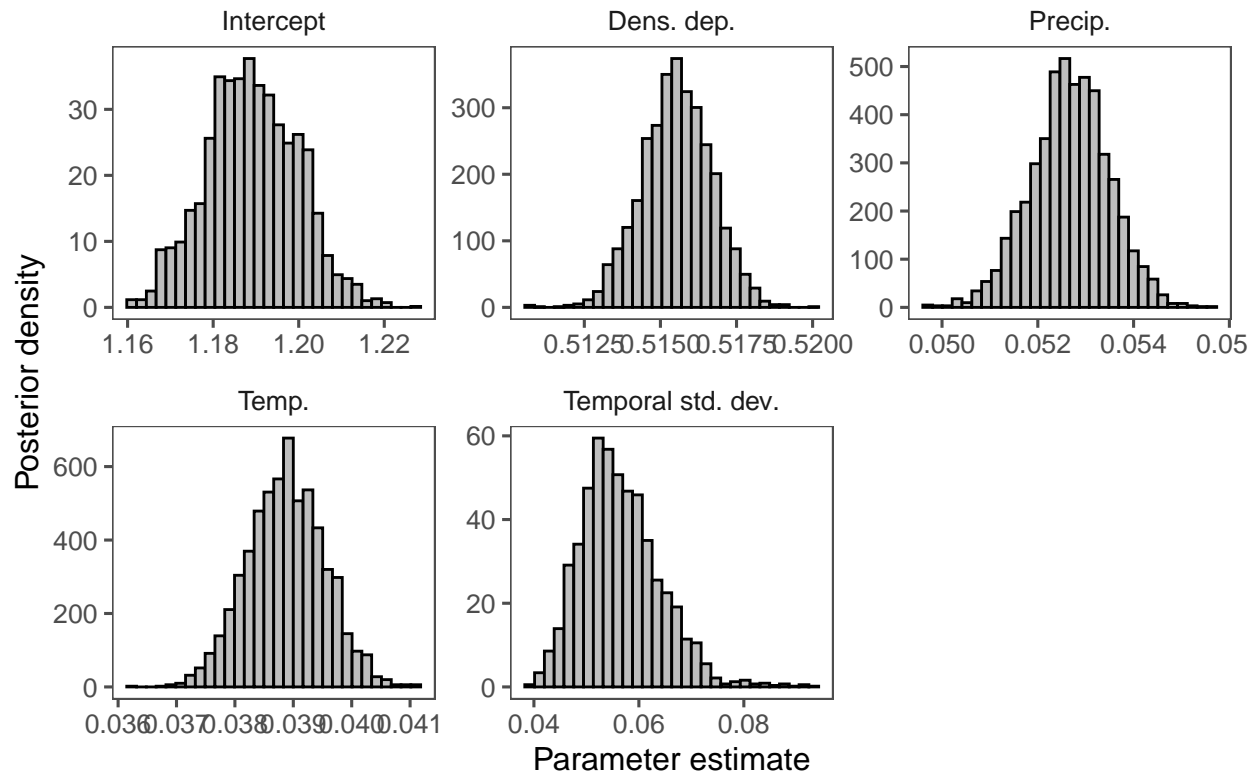
	Mean	Median	SD	2.5%	97.5%
Intercept, β_1	0.53	0.52	0.03	0.47	0.61
Density dependence, β_2	0.83	0.83	0.00	0.83	0.84
Precipitation effect, β_3	-0.20	-0.20	0.00	-0.21	-0.19
Temperature effect, β_4	-0.07	-0.07	0.00	-0.07	-0.06
Std. dev. of temporal random effect, σ_y	0.18	0.18	0.03	0.14	0.24

Natrona1



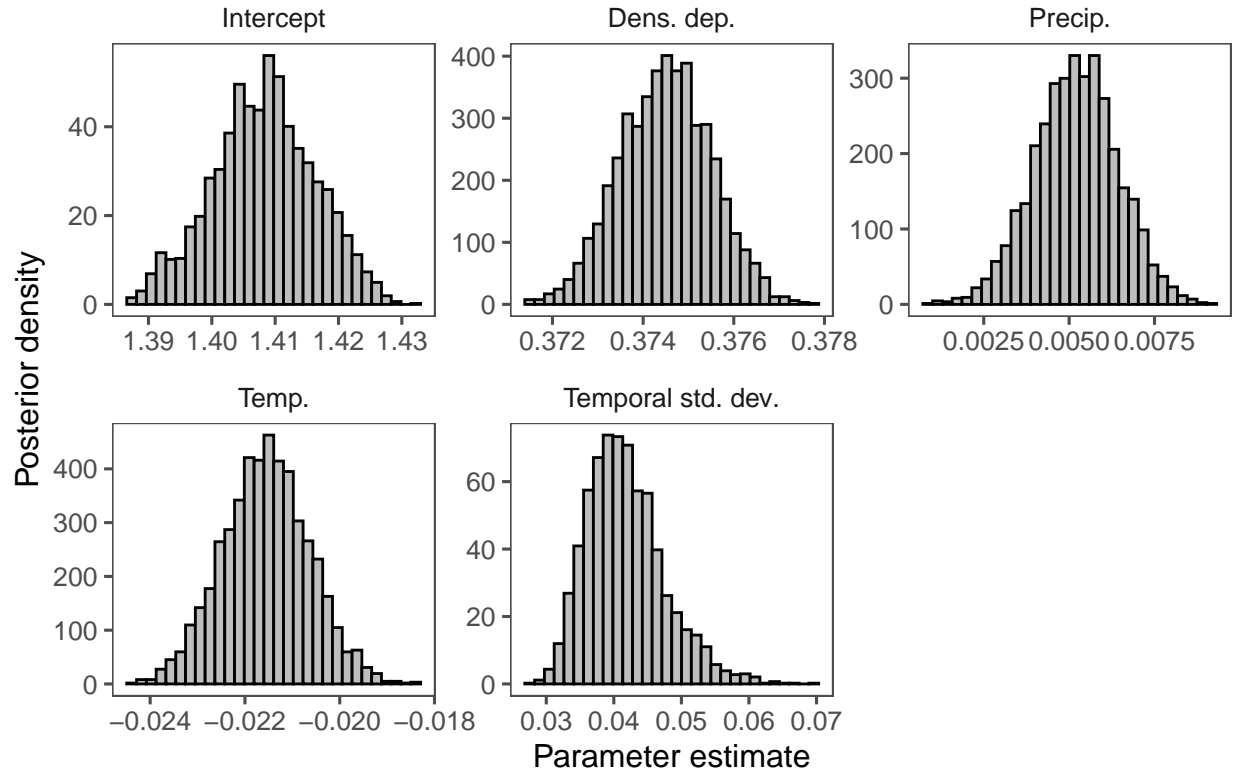
	Mean	Median	SD	2.5%	97.5%
Intercept, β_1	1.28	1.28	0.02	1.26	1.31
Density dependence, β_2	0.41	0.41	0.00	0.41	0.42
Precipitation effect, β_3	-0.10	-0.10	0.00	-0.10	-0.09
Temperature effect, β_4	-0.02	-0.02	0.00	-0.02	-0.01
Std. dev. of temporal random effect, σ_y	0.10	0.10	0.01	0.08	0.13

Natrona2



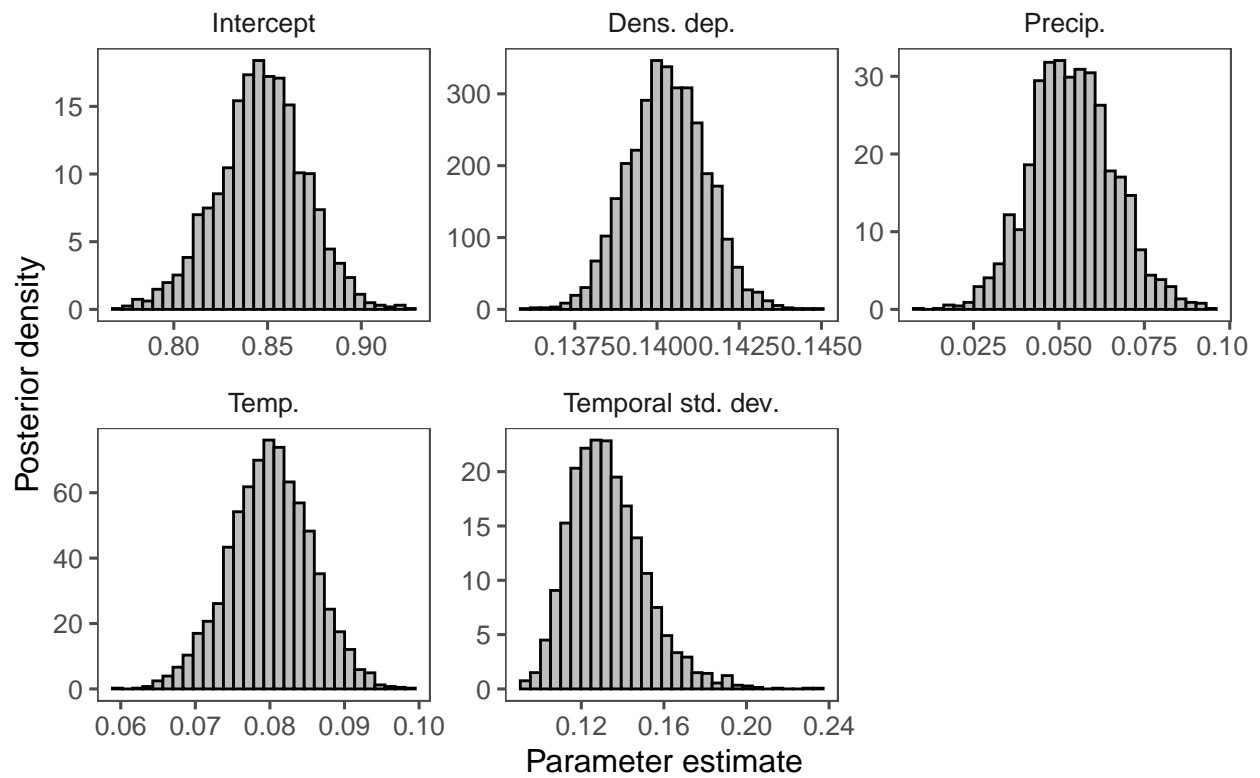
	Mean	Median	SD	2.5%	97.5%
Intercept, β_1	1.19	1.19	0.01	1.17	1.21
Density dependence, β_2	0.52	0.52	0.00	0.51	0.52
Precipitation effect, β_3	0.05	0.05	0.00	0.05	0.05
Temperature effect, β_4	0.04	0.04	0.00	0.04	0.04
Std. dev. of temporal random effect, σ_y	0.06	0.06	0.01	0.04	0.07

Natrona3



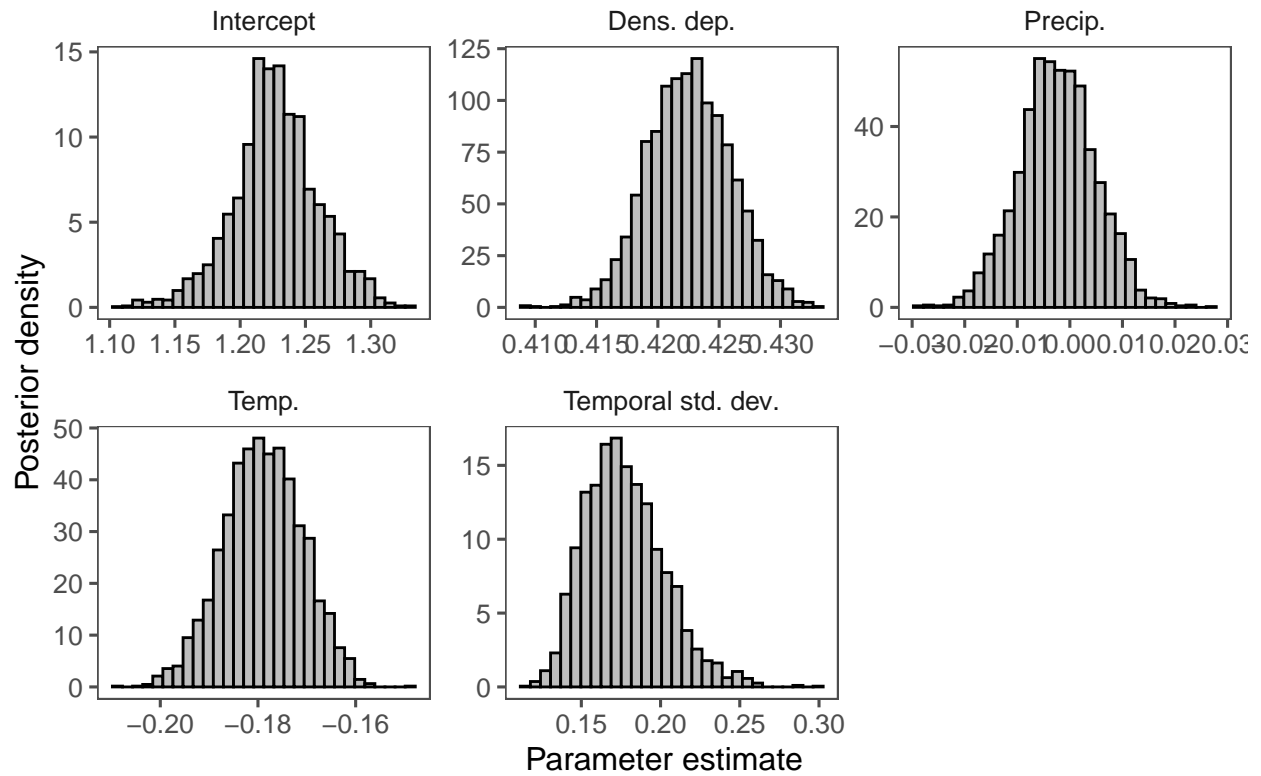
	Mean	Median	SD	2.5%	97.5%
Intercept, β_1	1.41	1.41	0.01	1.39	1.42
Density dependence, β_2	0.37	0.37	0.00	0.37	0.38
Precipitation effect, β_3	0.01	0.01	0.00	0.00	0.01
Temperature effect, β_4	-0.02	-0.02	0.00	-0.02	-0.02
Std. dev. of temporal random effect, σ_y	0.04	0.04	0.01	0.03	0.05

Newcastle



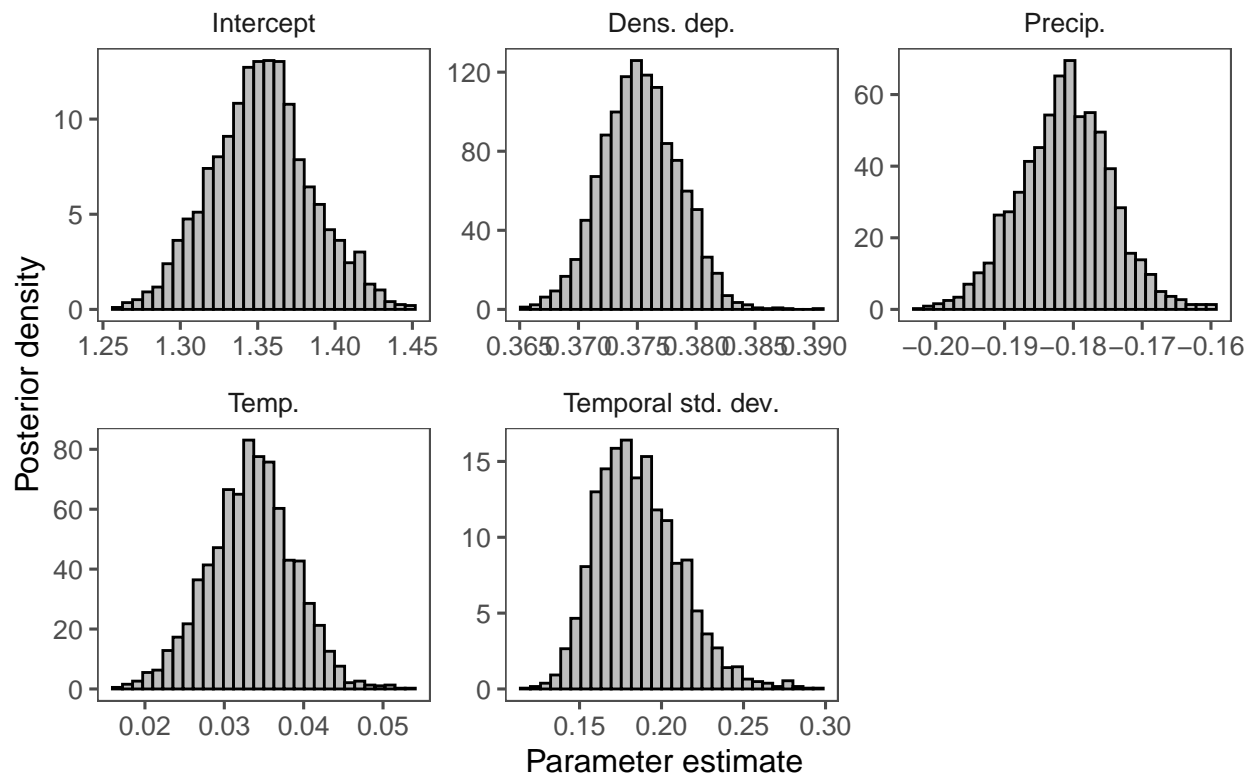
	Mean	Median	SD	2.5%	97.5%
Intercept, β_1	0.85	0.85	0.02	0.80	0.89
Density dependence, β_2	0.14	0.14	0.00	0.14	0.14
Precipitation effect, β_3	0.05	0.05	0.01	0.03	0.08
Temperature effect, β_4	0.08	0.08	0.01	0.07	0.09
Std. dev. of temporal random effect, σ_y	0.13	0.13	0.02	0.10	0.17

NorthGillette



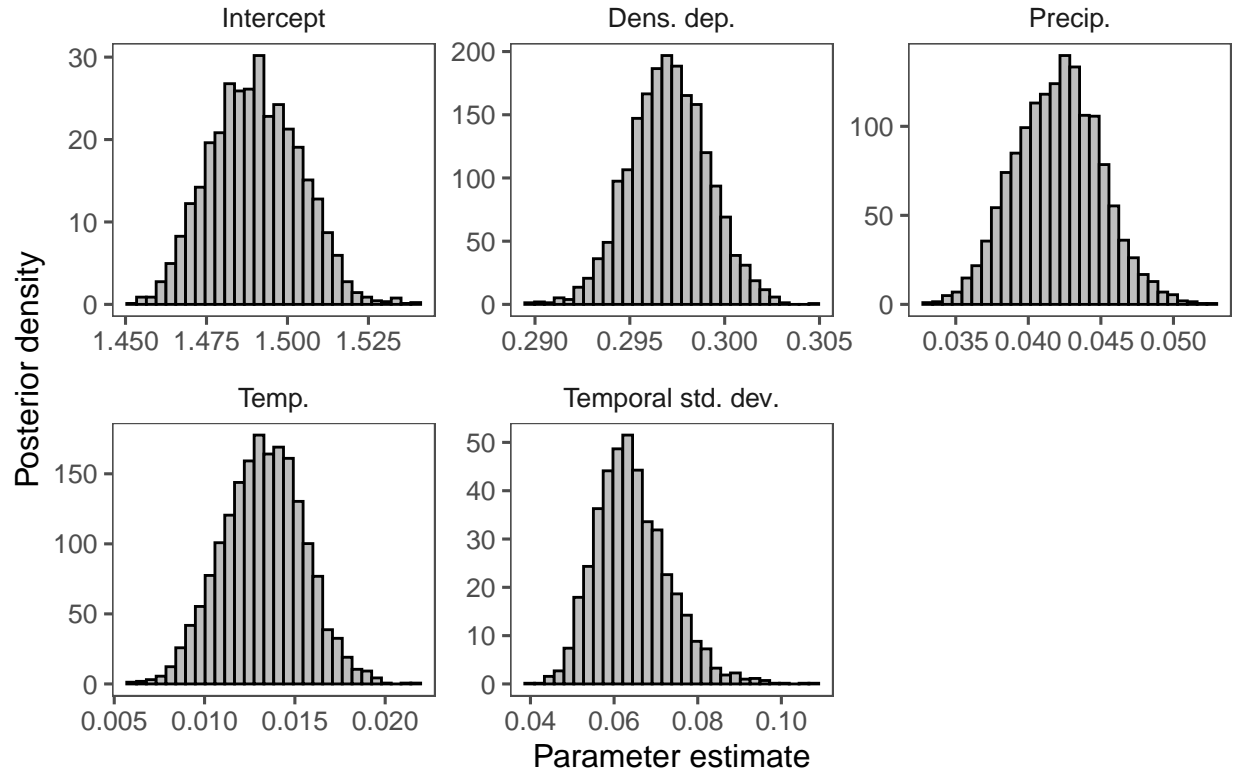
	Mean	Median	SD	2.5%	97.5%
Intercept, β_1	1.23	1.23	0.03	1.16	1.29
Density dependence, β_2	0.42	0.42	0.00	0.42	0.43
Precipitation effect, β_3	0.00	0.00	0.01	-0.02	0.01
Temperature effect, β_4	-0.18	-0.18	0.01	-0.20	-0.16
Std. dev. of temporal random effect, σ_y	0.18	0.17	0.02	0.14	0.23

NorthGlenrock



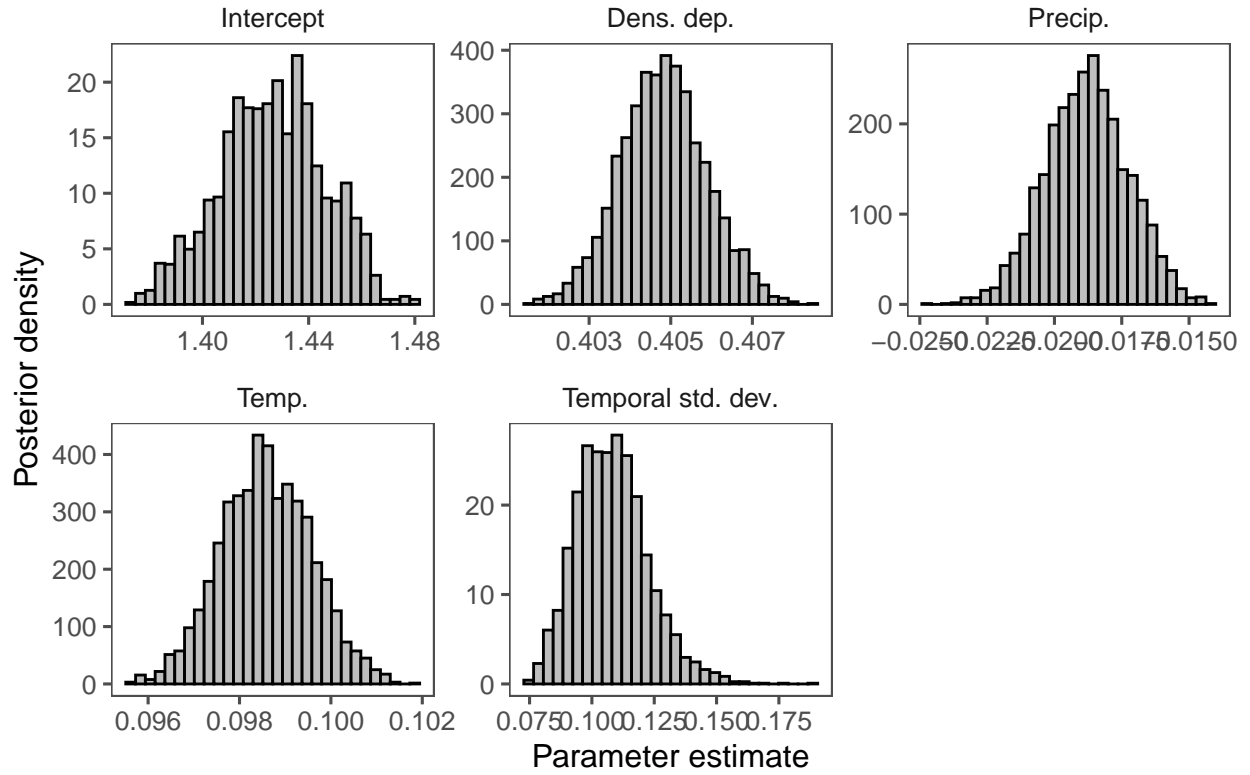
	Mean	Median	SD	2.5%	97.5%
Intercept, β_1	1.35	1.35	0.03	1.29	1.42
Density dependence, β_2	0.38	0.38	0.00	0.37	0.38
Precipitation effect, β_3	-0.18	-0.18	0.01	-0.19	-0.17
Temperature effect, β_4	0.03	0.03	0.01	0.02	0.04
Std. dev. of temporal random effect, σ_y	0.19	0.18	0.03	0.14	0.24

NorthLaramie



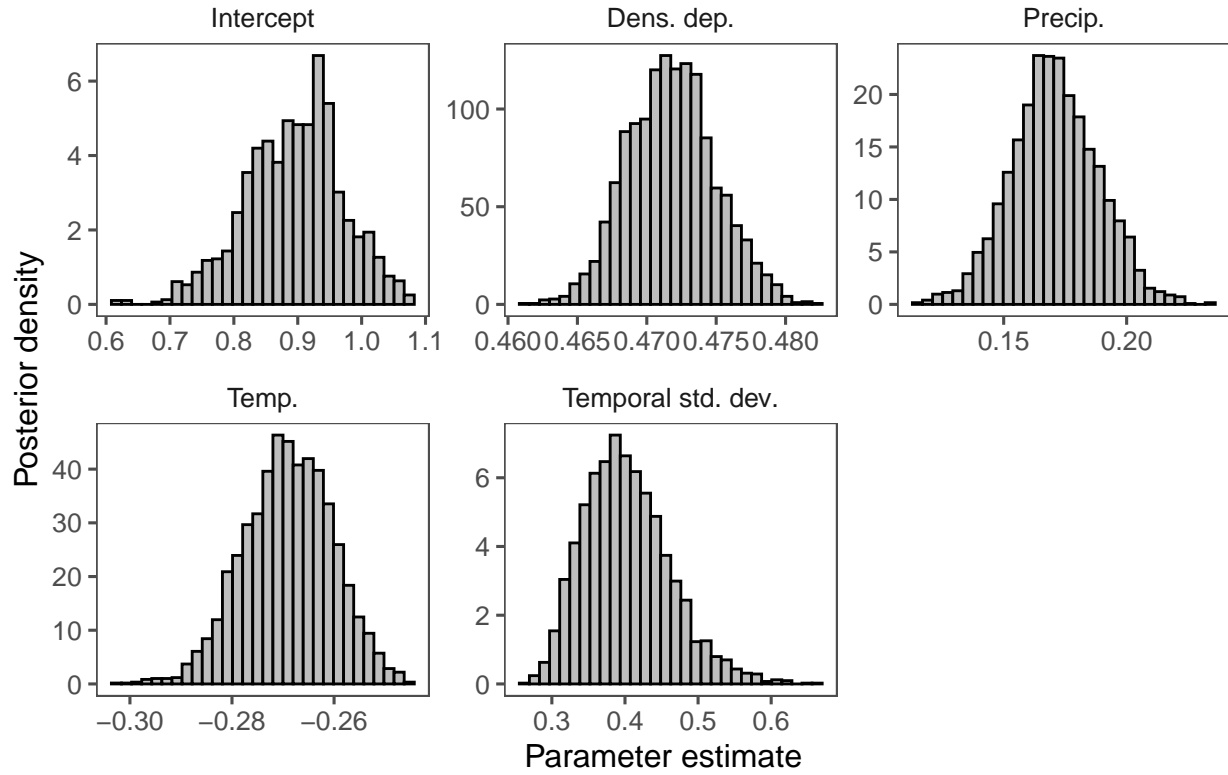
	Mean	Median	SD	2.5%	97.5%
Intercept, β_1	1.49	1.49	0.01	1.46	1.52
Density dependence, β_2	0.30	0.30	0.00	0.29	0.30
Precipitation effect, β_3	0.04	0.04	0.00	0.04	0.05
Temperature effect, β_4	0.01	0.01	0.00	0.01	0.02
Std. dev. of temporal random effect, σ_y	0.06	0.06	0.01	0.05	0.08

OregonBasin



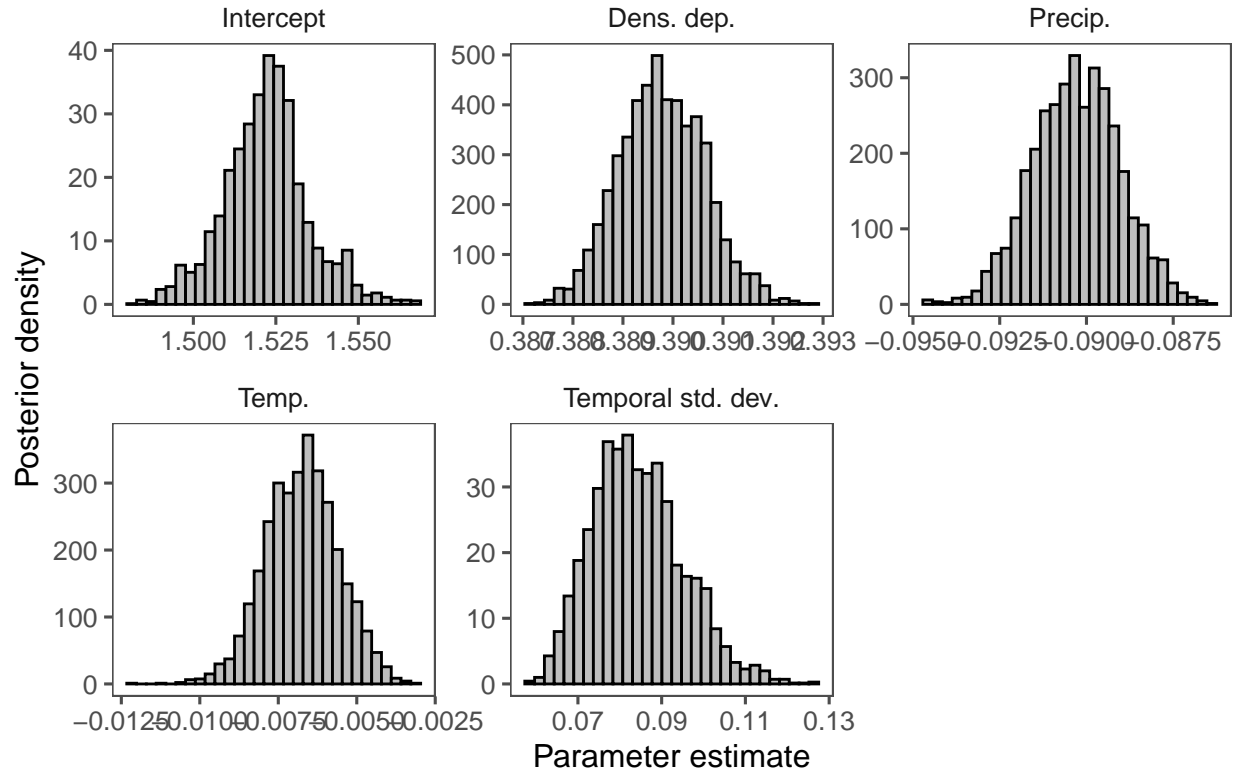
	Mean	Median	SD	2.5%	97.5%
Intercept, β_1	1.43	1.43	0.02	1.39	1.46
Density dependence, β_2	0.40	0.40	0.00	0.40	0.41
Precipitation effect, β_3	-0.02	-0.02	0.00	-0.02	-0.02
Temperature effect, β_4	0.10	0.10	0.00	0.10	0.10
Std. dev. of temporal random effect, σ_y	0.11	0.11	0.01	0.08	0.14

Powder



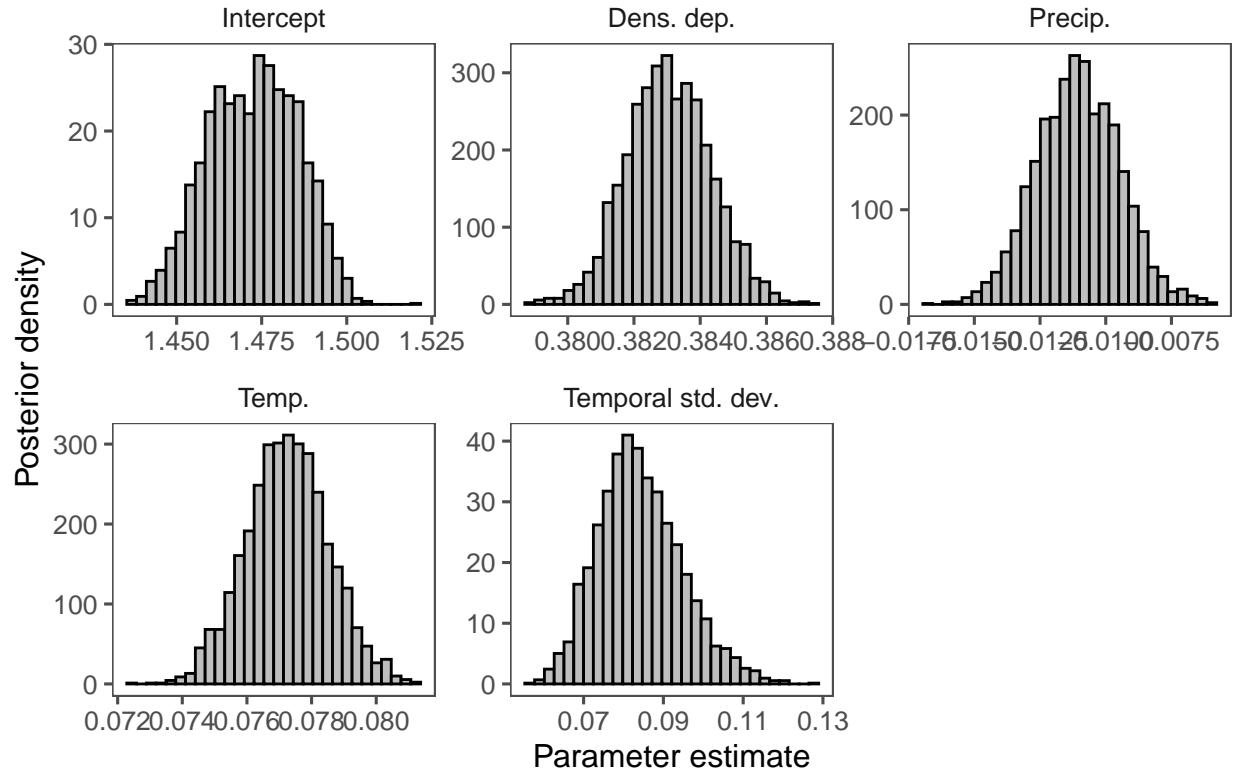
	Mean	Median	SD	2.5%	97.5%
Intercept, β_1	0.89	0.90	0.08	0.74	1.04
Density dependence, β_2	0.47	0.47	0.00	0.47	0.48
Precipitation effect, β_3	0.17	0.17	0.02	0.14	0.21
Temperature effect, β_4	-0.27	-0.27	0.01	-0.29	-0.25
Std. dev. of temporal random effect, σ_y	0.40	0.40	0.06	0.31	0.54

Sage



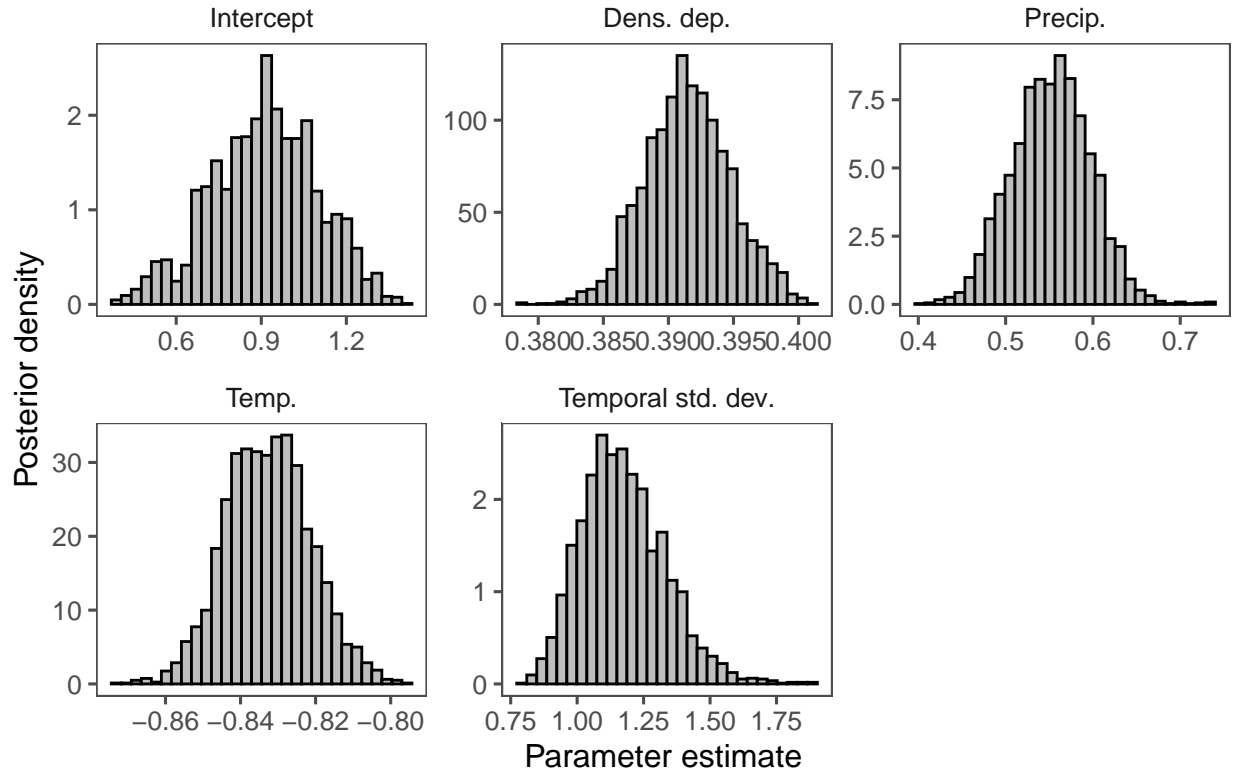
	Mean	Median	SD	2.5%	97.5%
Intercept, β_1	1.52	1.52	0.01	1.50	1.55
Density dependence, β_2	0.39	0.39	0.00	0.39	0.39
Precipitation effect, β_3	-0.09	-0.09	0.00	-0.09	-0.09
Temperature effect, β_4	-0.01	-0.01	0.00	-0.01	0.00
Std. dev. of temporal random effect, σ_y	0.08	0.08	0.01	0.07	0.11

SaltWells



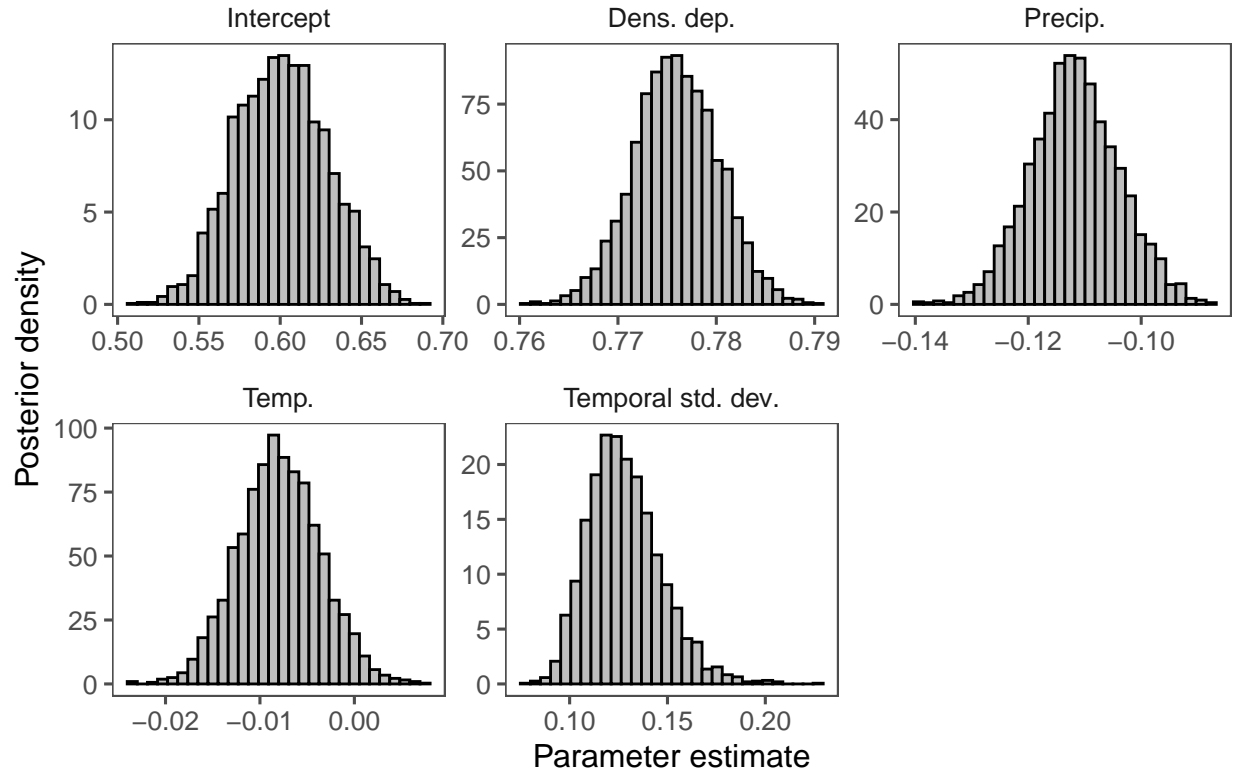
	Mean	Median	SD	2.5%	97.5%
Intercept, β_1	1.47	1.47	0.01	1.45	1.50
Density dependence, β_2	0.38	0.38	0.00	0.38	0.39
Precipitation effect, β_3	-0.01	-0.01	0.00	-0.01	-0.01
Temperature effect, β_4	0.08	0.08	0.00	0.07	0.08
Std. dev. of temporal random effect, σ_y	0.08	0.08	0.01	0.07	0.11

Seedskadee



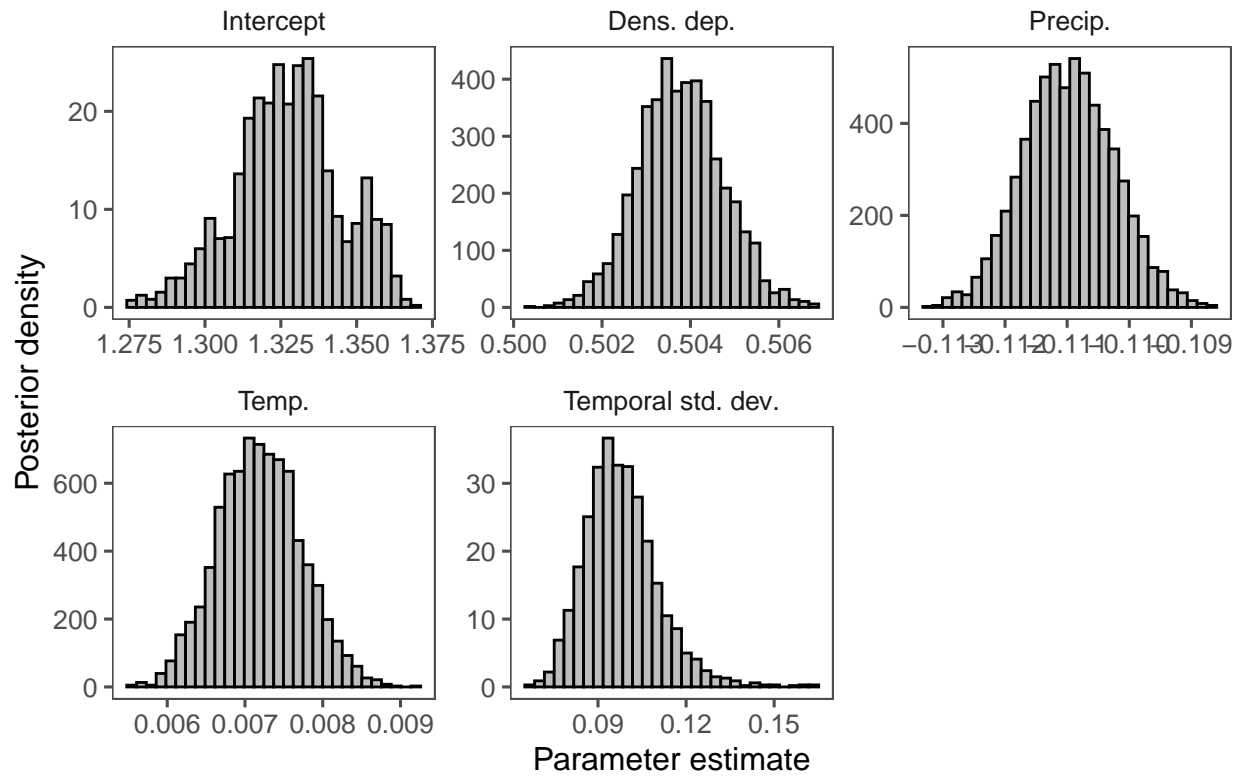
	Mean	Median	SD	2.5%	97.5%
Intercept, β_1	0.91	0.92	0.19	0.52	1.27
Density dependence, β_2	0.39	0.39	0.00	0.39	0.40
Precipitation effect, β_3	0.55	0.55	0.04	0.47	0.64
Temperature effect, β_4	-0.83	-0.83	0.01	-0.85	-0.81
Std. dev. of temporal random effect, σ_y	1.17	1.16	0.16	0.91	1.52

Shell



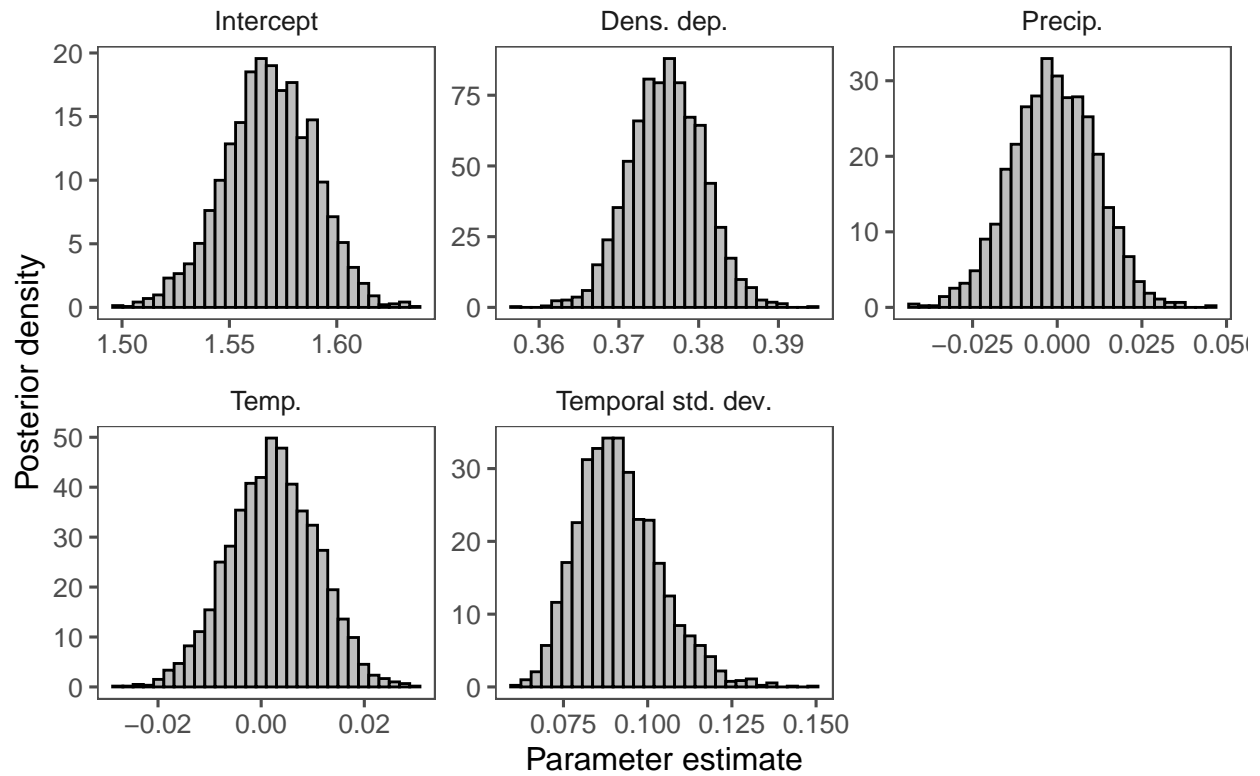
	Mean	Median	SD	2.5%	97.5%
Intercept, β_1	0.60	0.60	0.03	0.55	0.66
Density dependence, β_2	0.78	0.78	0.00	0.77	0.78
Precipitation effect, β_3	-0.11	-0.11	0.01	-0.13	-0.10
Temperature effect, β_4	-0.01	-0.01	0.00	-0.02	0.00
Std. dev. of temporal random effect, σ_y	0.13	0.13	0.02	0.10	0.17

SouthRawlins



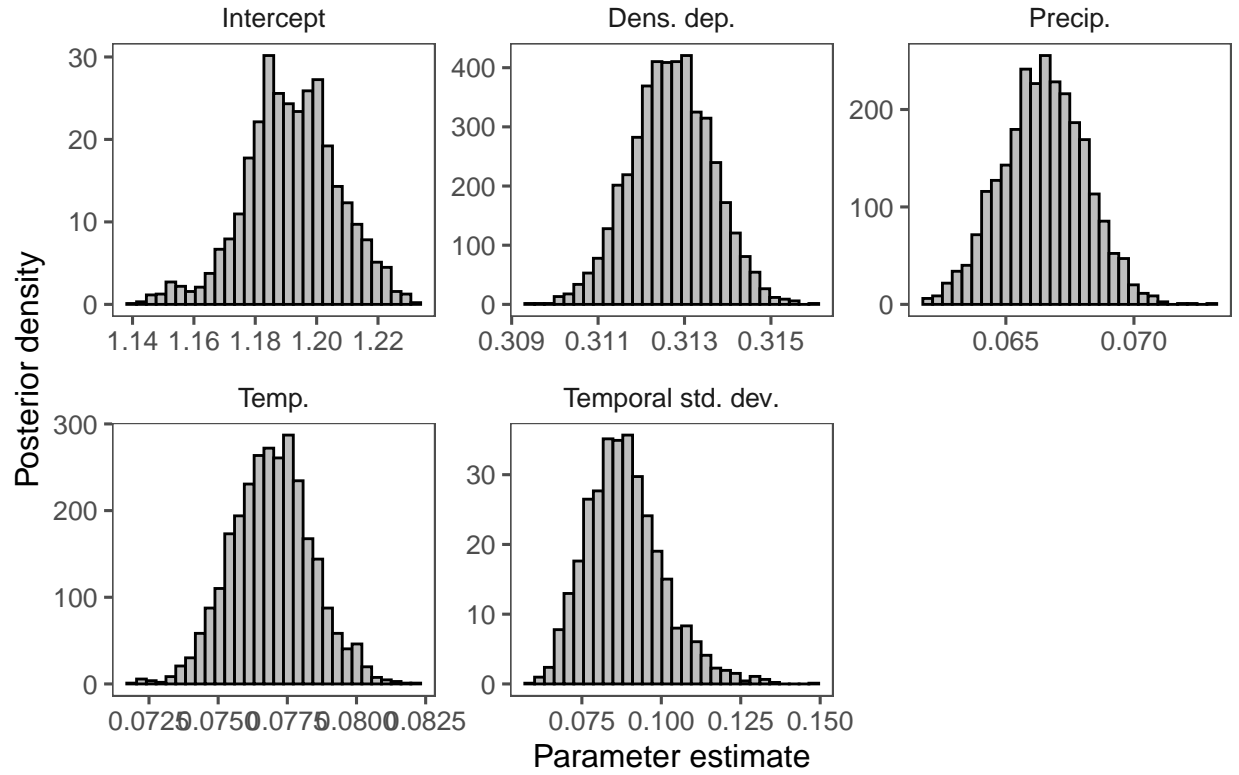
	Mean	Median	SD	2.5%	97.5%
Intercept, β_1	1.33	1.33	0.02	1.29	1.36
Density dependence, β_2	0.50	0.50	0.00	0.50	0.51
Precipitation effect, β_3	-0.11	-0.11	0.00	-0.11	-0.11
Temperature effect, β_4	0.01	0.01	0.00	0.01	0.01
Std. dev. of temporal random effect, σ_y	0.10	0.10	0.01	0.08	0.13

Thermopolis



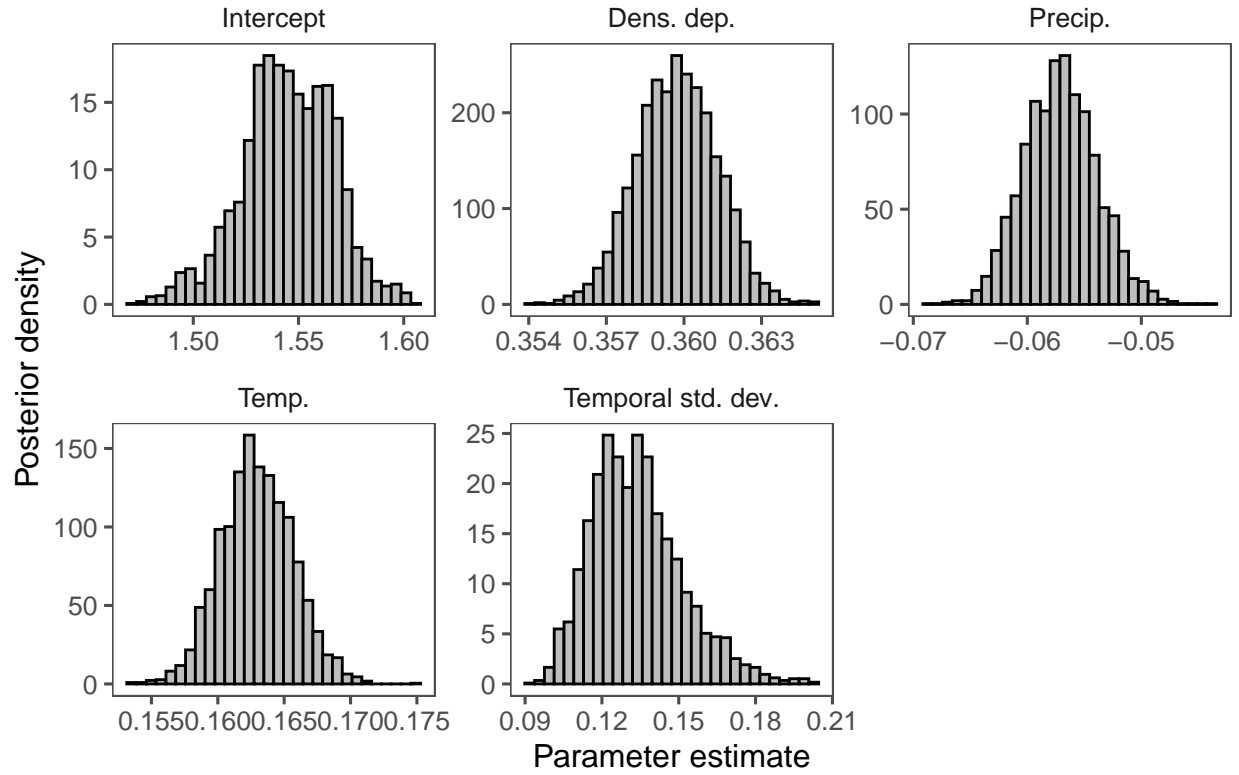
	Mean	Median	SD	2.5%	97.5%
Intercept, β_1	1.57	1.57	0.02	1.53	1.61
Density dependence, β_2	0.38	0.38	0.00	0.37	0.39
Precipitation effect, β_3	0.00	0.00	0.01	-0.03	0.02
Temperature effect, β_4	0.00	0.00	0.01	-0.01	0.02
Std. dev. of temporal random effect, σ_y	0.09	0.09	0.01	0.07	0.12

ThunderBasin



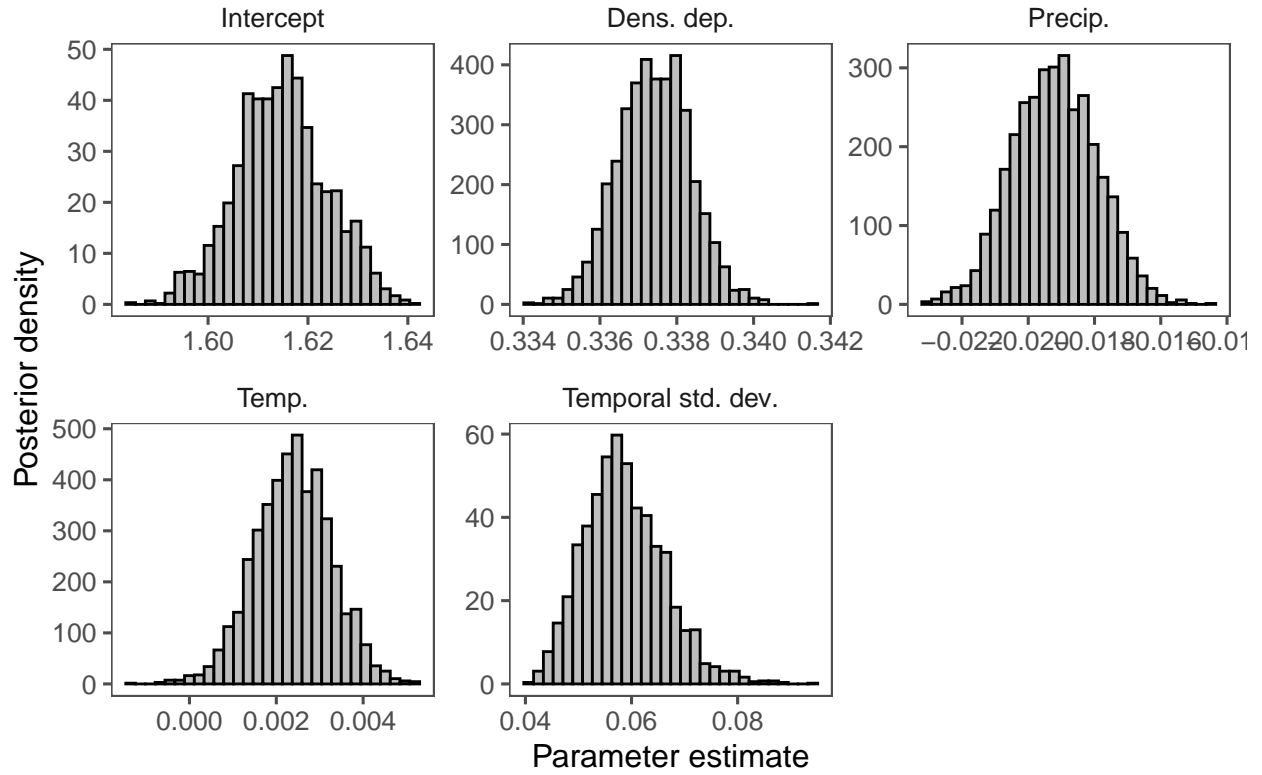
	Mean	Median	SD	2.5%	97.5%
Intercept, β_1	1.19	1.19	0.02	1.16	1.22
Density dependence, β_2	0.31	0.31	0.00	0.31	0.31
Precipitation effect, β_3	0.07	0.07	0.00	0.06	0.07
Temperature effect, β_4	0.08	0.08	0.00	0.07	0.08
Std. dev. of temporal random effect, σ_y	0.09	0.09	0.01	0.07	0.12

Uinta



	Mean	Median	SD	2.5%	97.5%
Intercept, β_1	1.54	1.54	0.02	1.50	1.59
Density dependence, β_2	0.36	0.36	0.00	0.36	0.36
Precipitation effect, β_3	-0.06	-0.06	0.00	-0.06	-0.05
Temperature effect, β_4	0.16	0.16	0.00	0.16	0.17
Std. dev. of temporal random effect, σ_y	0.13	0.13	0.02	0.10	0.17

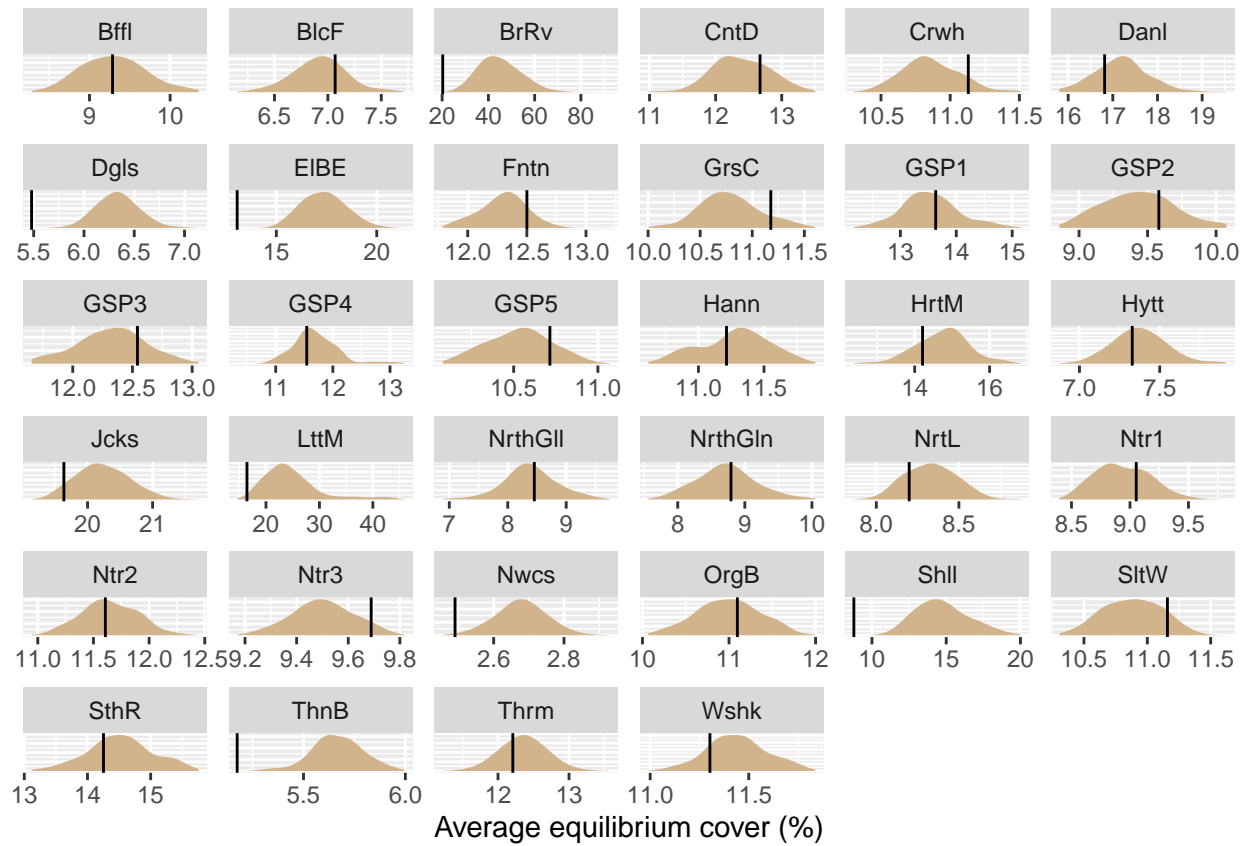
Washakie



	Mean	Median	SD	2.5%	97.5%
Intercept, β_1	1.61	1.61	0.01	1.60	1.63
Density dependence, β_2	0.34	0.34	0.00	0.34	0.34
Precipitation effect, β_3	-0.02	-0.02	0.00	-0.02	-0.02
Temperature effect, β_4	0.00	0.00	0.00	0.00	0.00
Std. dev. of temporal random effect, σ_y	0.06	0.06	0.01	0.05	0.08

Estimated equilibrium cover

Posterior distributions of equilibrium cover calculated from fitted model parameters. The vertical black lines show the observed mean cover for each core area from 1985-2018.



Estimated colonization probabilities

Results from colonization model for each core area. $\Pr(\text{colonize} \mid \text{cover} = 0)$ reads, “the probability of colonization given that current cover is zero.”

Core area	$\Pr(\text{colonize} \mid \text{cover} = 0)$	Mean cover in colonized cells
Bear River	0.35	3
Blacks Fork	0.14	2
Buffalo	0.35	2
Continental Divide	0.22	2
Crowheart	0.21	2
Daniel	0.22	2
Douglas	0.37	2
Elk Basin East	0.42	2
Fontenelle	0.17	2
Grass Creek	0.15	2
Greater South Pass 1	0.17	2
Greater South Pass 2	0.14	2
Greater South Pass 3	0.18	2
Greater South Pass 4	0.23	2
Greater South Pass 5	0.13	2
Hanna	0.21	2
Heart Mountain	0.31	2
Hyattville	0.18	2
Jackson	0.42	4
Little Mountain	0.43	3
Natrona 1	0.21	2
Natrona 2	0.30	2
Natrona 3	0.19	2
Newcastle	0.19	2
North Gillette	0.17	2
North Glenrock	0.28	3
North Laramie	0.38	3
Oregon Basin	0.19	2
Salt Wells	0.20	2
Shell	0.19	2
South Rawlins	0.39	3
Thermopolis	0.26	3
Thunder Basin	0.24	2
Washakie	0.36	3

Nesting and summer cover thresholds

Name	Abbreviation	Region	NestingTarget	SummerTarget
Bear River	BrRv	Southwest Region	15.43	16.71
Blacks Fork	BlcF	Southwest Region	15.43	16.71
Buffalo	Bffl	Northeast Region	9.04	10.36
Continental Divide	CntD	Southwest Region	15.43	16.71
Crowheart	Crwh	Central Region	13.32	12.29
Daniel	Danl	Southwest Region	15.43	16.71
Douglas	Dgls	Northeast Region	9.04	10.36
Elk Basin East	ElBE	Central Region	13.32	12.29
Elk Basin West	ElBW	Central Region	13.32	12.29
Fontenelle	Fntn	Southwest Region	15.43	16.71
Grass Creek	GrsC	Central Region	13.32	12.29
Greater South Pass 1	GSP1	Southwest Region	15.43	16.71
Greater South Pass 2	GSP2	Southwest Region	15.43	16.71
Greater South Pass 3	GSP3	Central Region	13.32	12.29
Greater South Pass 4	GSP4	Central Region	13.32	12.29
Greater South Pass 5	GSP5	Southwest Region	15.43	16.71
Hanna	Hann	Central Region	13.32	12.29
Heart Mountain	HrtM	Central Region	13.32	12.29
Hyattville	Hytt	Central Region	13.32	12.29
Jackson	Jcks	Southwest Region	15.43	16.71
Little Mountain	LttM	Central Region	13.32	12.29
Natrona 1	Ntr1	Central Region	13.32	12.29
Natrona 2	Ntr2	Central Region	13.32	12.29
Natrona 3	Ntr3	Northeast Region	9.04	10.36
Newcastle	Nwcs	Northeast Region	9.04	10.36
North Gillette	NrthGll	Northeast Region	9.04	10.36
North Glenrock	NrthGln	Northeast Region	9.04	10.36
North Laramie	NrtL	Central Region	13.32	12.29
Oregon Basin	OrgB	Central Region	13.32	12.29
Powder	Pwdr	Southwest Region	15.43	16.71
Sage	Sage	Southwest Region	15.43	16.71
Salt Wells	SltW	Southwest Region	15.43	16.71
Seedskadee	Sdsk	Southwest Region	15.43	16.71
Shell	Shll	Central Region	13.32	12.29
South Rawlins	SthR	Central Region	13.32	12.29
Thermopolis	Thrm	Central Region	13.32	12.29
Thunder Basin	ThnB	Northeast Region	9.04	10.36
Uinta	Uint	Southwest Region	15.43	16.71
Washakie	Wshk	Central Region	13.32	12.29

Summer habitat cover targets compared to projections

Projections of the proportion of 100-meter cells within a core area where sagebrush percent cover exceeds the sage-grouse summer cover threshold defined for each core area. The solid line is the median of the posterior predictive distribution; light shaded ribbon bounds the 68% BCI; very light shaded ribbon bounds the 95% BCI. The dashed horizontal line shows where the proportion of cells is equal to 50% of the area.

