

[10.1071/BT21060](https://doi.org/10.1071/BT21060)

Australian Journal of Botany

Supplementary Material

Stability among cyclic change in an Antipodean pond and bolster heath system 1983–2017

J. B. Kirkpatrick^{A,}, N. Gibson^A, and N. Fitzgerald^A*

^ASchool of Geography, Planning, and Spatial Sciences, University of Tasmania, Private Bag 78, GPO, Hobart, Tas. 7001, Australia.

*Correspondence to: J. B. Kirkpatrick School of Geography, Planning, and Spatial Sciences, University of Tasmania, Private Bag 78, GPO, Hobart, Tas. 7001, Australia Email: j.kirkpatrick@utas.edu.au

Table S1. Autocorrelations across contiguous quadrats for bolster taxa at sites 1 and 2 using Moran's I

Site	Taxa	Date	Observed	Expected	<i>P</i> -value
1	Abrotanella	1988	-0.05	-0.14	0.488
1	Abrotanella	1993	0.15	-0.14	0.007
1	Abrotanella	1998	0.17	-0.11	0.011
1	Abrotanella	2004	-0.07	-0.11	0.700
1	Abrotanella	2009	0.21	-0.11	0.004
1	Abrotanella	2014	0.01	-0.11	0.236
1	Abrotanella	2017	-0.16	-0.11	0.651
1	Donatia	1988	0.10	-0.14	0.010
1	Donatia	1993	-0.04	-0.14	0.416
1	Donatia	1998	-0.06	-0.11	0.655
1	Donatia	2004	-0.17	-0.11	0.127
1	Donatia	2009	-0.30	-0.11	0.010
1	Donatia	2014	0.22	-0.11	0.001
1	Donatia	2017	0.02	-0.11	0.159
1	Dracophyllum	1988	-0.15	-0.14	0.927
1	Dracophyllum	1993	-0.21	-0.14	0.593
1	Dracophyllum	1998	0.06	-0.11	0.096
1	Dracophyllum	2004	0.17	-0.11	0.011
1	Dracophyllum	2009	0.24	-0.11	0.001
1	Dracophyllum	2014	-0.15	-0.11	0.703
1	Dracophyllum	2017	-0.10	-0.11	0.931
1	Oreobolus	1988	-0.29	-0.14	0.209
1	Oreobolus	1993	-0.26	-0.14	0.237
1	Oreobolus	1998	-0.25	-0.11	0.132
1	Oreobolus	2004	-0.30	-0.11	0.060
1	Oreobolus	2009	-0.19	-0.11	0.390
1	Oreobolus	2014	-0.07	-0.11	0.636
1	Oreobolus	2017	-0.30	-0.11	0.026
1	Pterygopappus	1988	-0.24	-0.14	0.430
1	Pterygopappus	1993	-0.25	-0.14	0.283
1	Pterygopappus	1998	-0.18	-0.11	0.467
1	Pterygopappus	2004	-0.09	-0.11	0.819
1	Pterygopappus	2009	0.09	-0.11	0.064
1	Pterygopappus	2014	-0.18	-0.11	0.465
1	Pterygopappus	2017	-0.16	-0.11	0.640
2	Donatia	1988	-0.10	-0.13	0.844
2	Donatia	1993	0.10	-0.13	0.024
2	Donatia	1998	0.06	-0.13	0.075
2	Donatia	2004	-0.01	-0.10	0.278
2	Donatia	2009	0.08	-0.10	0.071
2	Donatia	2014	0.03	-0.10	0.190
2	Donatia	2017	-0.03	-0.10	0.516

Site	Taxa	Date	Observed	Expected	<i>P</i> -value
2	Dracophyllum	1988	-0.19	-0.13	0.566
2	Dracophyllum	1993	0.22	-0.13	0.004
2	Dracophyllum	1998	-0.04	-0.13	0.422
2	Dracophyllum	2004	0.05	-0.10	0.136
2	Dracophyllum	2009	0.08	-0.10	0.070
2	Dracophyllum	2014	-0.13	-0.10	0.779
2	Dracophyllum	2017	-0.14	-0.10	0.660
2	Oreobolus	1988	-0.26	-0.13	0.097
2	Oreobolus	1993	-0.10	-0.13	0.733
2	Oreobolus	1998	0.20	-0.13	0.001
2	Oreobolus	2004	0.22	-0.10	0.000
2	Oreobolus	2009	-0.06	-0.10	0.231
2	Oreobolus	2014	-0.11	-0.10	0.512
2	Oreobolus	2017	-0.07	-0.10	0.038
2	Pterygopappus	1988	-0.14	-0.13	0.862
2	Pterygopappus	1993	0.05	-0.13	0.017
2	Pterygopappus	1998	0.11	-0.13	0.010
2	Pterygopappus	2004	0.17	-0.10	0.003
2	Pterygopappus	2009	-0.13	-0.10	0.766
2	Pterygopappus	2014	-0.09	-0.10	0.942
2	Pterygopappus	2017	0.00	-0.10	0.271

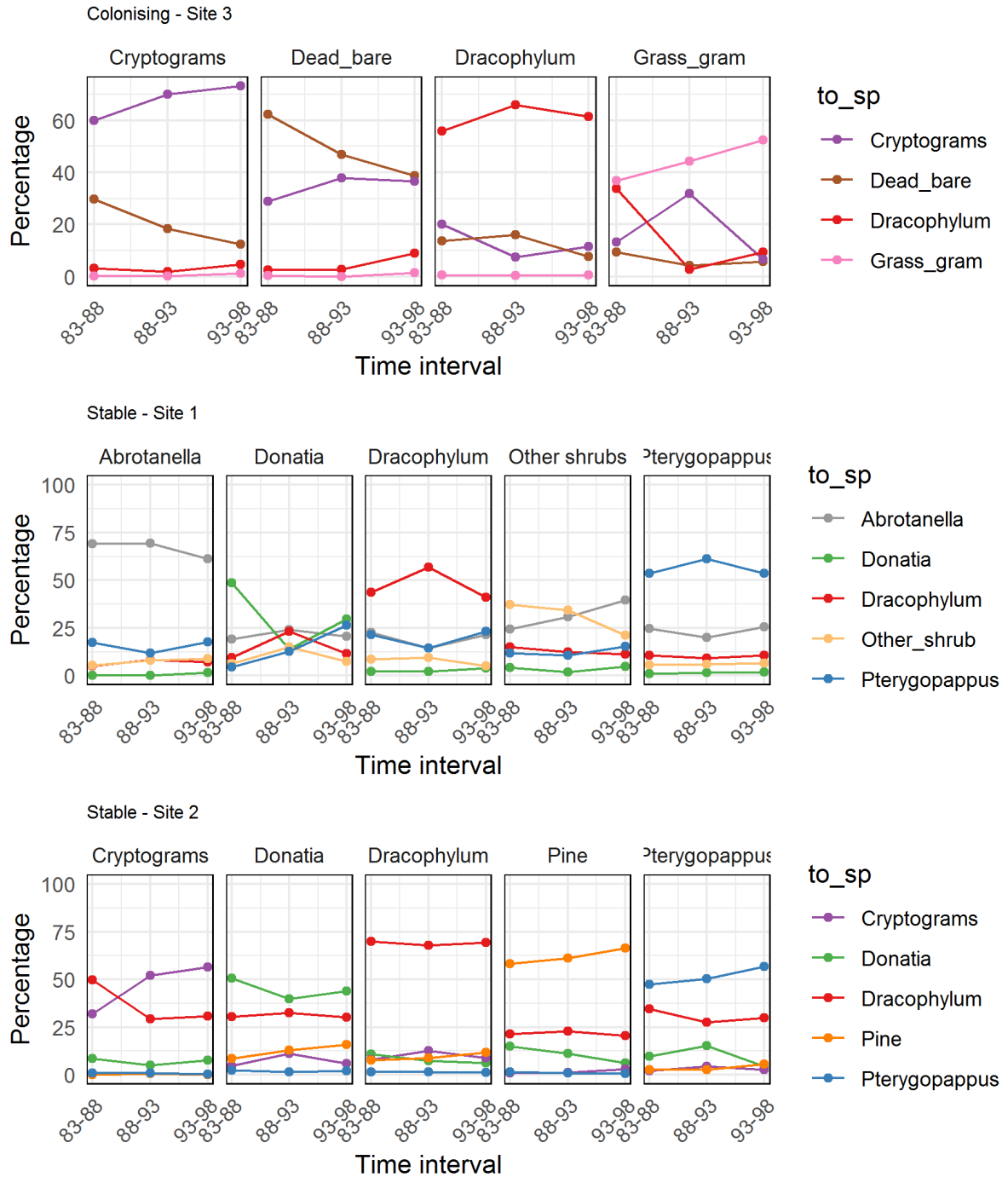


Figure S1. Percentage transitions from bolster and other dominant states (listed top of graphs) to subsequent states (coloured line) for colonising (site 3) and stable (site 1 and 2) facies of bolster heath over the first three time intervals. Bolster species generally showed moderately high auto transitions except for *Donatia* at site 1 where it was only a minor component of the vegetation.

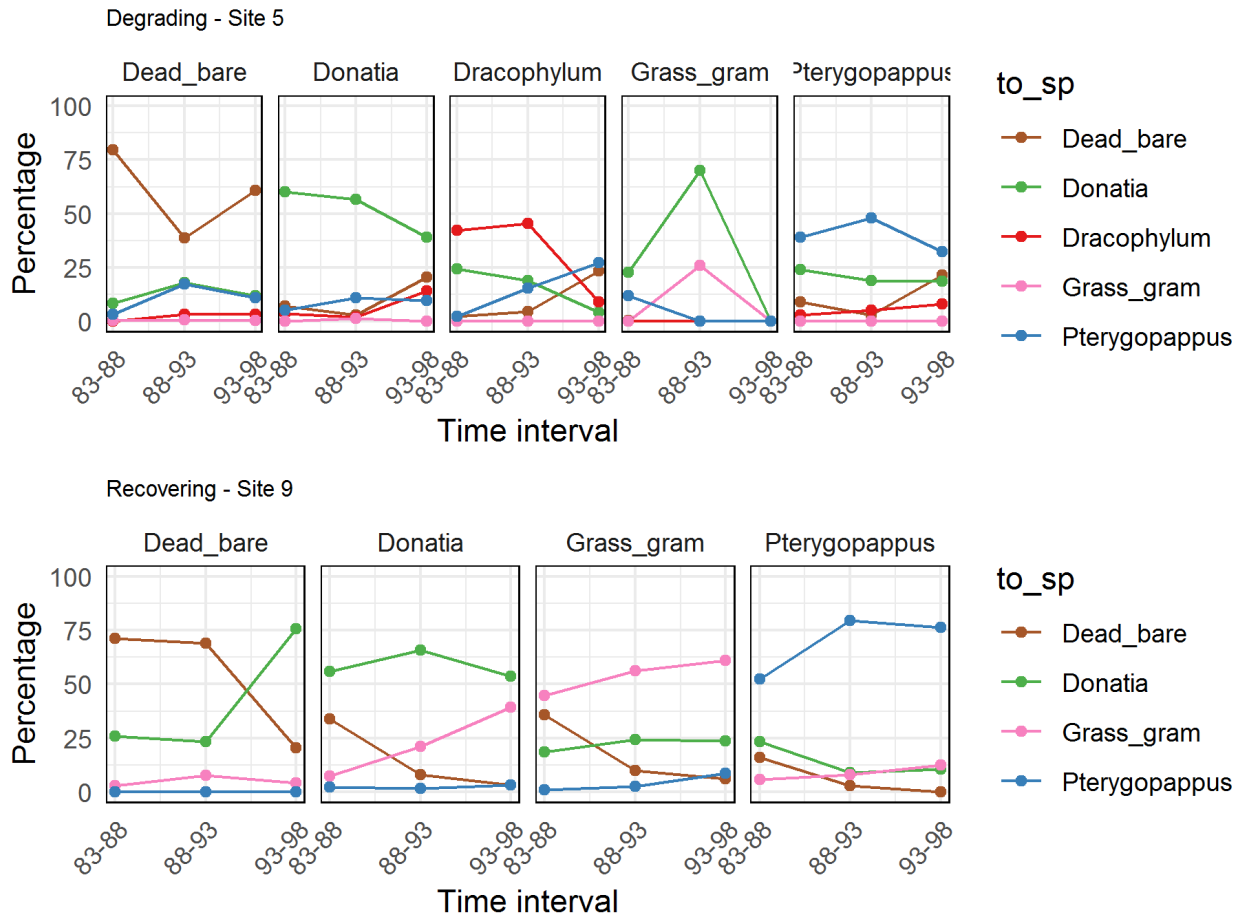


Figure S2. Percentage transitions from bolster and other dominant states (listed top of graphs) to subsequent states (coloured line) for degrading (site 5) and recovering (site 9) facies of bolster heath over the first three time intervals.