

1 **Tree traits across a latitudinal gradient in Northeastern North America reveal future**
2 **of forests under climate change ...I hope**

3 Flynn, Wolkovich

4 *The Arnold Arboretum of Harvard University*

5 Clark 2016: Variation in traits at community level comes from trait syndromes, diversity of species possessing
6 them, and environmental variation which affects both of these. Syndromes: variation within and between species
7 (Westoby 2002).

8 Covariance in leaf N and P. Low wood density, rapid growth (Chave 2009 Ecol Lett wood economics spectrum).

Parameter	Rhat	n_eff	mean	sd	2.5%	50%	97.5%
a_0	1.0	10012	74.6	97.6	-117.5	74.0	263.1
b_lat_0	1.0	465	5.8	5.9	-6.1	5.9	17.3
b_site_0	1.0	3390	-31.1	7.3	-45.1	-31.1	-16.9
mu_a_sp[1]	1.0	10012	0.4	8.8	-16.6	0.4	17.4
mu_a_sp[2]	1.0	10012	5.5	8.7	-11.4	5.5	22.5
mu_a_sp[3]	1.0	10012	-2.0	8.7	-19.2	-2.1	14.8
mu_a_sp[4]	1.0	10012	1.3	8.6	-15.6	1.4	18.2
mu_a_sp[5]	1.0	10012	-2.6	9.0	-19.8	-2.5	14.7
mu_a_sp[6]	1.0	10012	-2.5	9.3	-20.8	-2.4	15.5
mu_a_sp[7]	1.0	10012	-5.3	9.3	-23.6	-5.2	12.8
mu_a_sp[8]	1.0	10012	9.2	8.6	-7.1	9.2	26.0
mu_a_sp[9]	1.0	10012	-0.3	9.6	-19.3	-0.2	18.3
mu_a_sp[10]	1.0	10012	4.7	8.6	-12.3	4.7	21.7
mu_a_sp[11]	1.0	10012	-1.2	9.6	-19.9	-1.2	17.9
mu_a_sp[12]	1.0	10012	0.1	9.1	-17.7	0.1	17.8
mu_a_sp[13]	1.0	10012	-2.7	8.6	-19.7	-2.6	13.8
mu_a_sp[14]	1.0	10012	-0.5	8.4	-16.9	-0.4	15.9
mu_a_sp[15]	1.0	10012	-8.4	9.0	-25.9	-8.4	9.2
mu_a_sp[16]	1.0	10012	1.2	8.7	-15.8	1.1	18.2
mu_a_sp[17]	1.0	10012	1.3	9.2	-16.9	1.2	19.2
mu_a_sp[18]	1.0	10012	-1.7	8.7	-18.4	-1.6	15.4
mu_a_sp[19]	1.0	10012	1.4	8.5	-15.2	1.4	18.0
mu_a_sp[20]	1.0	10012	3.9	9.0	-13.7	3.9	21.4
mu_a_sp[21]	1.0	10012	0.8	9.6	-17.6	0.8	19.3
mu_a_sp[22]	1.0	10012	-4.3	9.0	-21.8	-4.4	13.4
mu_a_sp[23]	1.0	10012	3.7	9.6	-14.9	3.9	22.2
mu_a_sp[24]	1.0	10012	-2.2	9.5	-21.0	-2.2	16.6
mu_a_sp[25]	1.0	10012	3.1	8.7	-13.8	3.2	20.2
mu_a_sp[26]	1.0	10012	1.8	8.6	-15.1	1.8	18.5
mu_a_sp[27]	1.0	10012	-0.2	9.4	-18.9	-0.2	18.5
mu_a_sp[28]	1.0	10012	1.6	8.6	-15.1	1.6	18.7
mu_a_sp[29]	1.0	10012	-1.2	9.6	-19.7	-1.2	17.3
mu_a_sp[30]	1.0	10012	-2.0	9.5	-20.6	-2.0	16.3
mu_a_sp[31]	1.0	10012	1.6	8.9	-16.0	1.5	19.4
mu_a_sp[32]	1.0	10012	1.9	9.3	-16.2	1.9	20.2
mu_a_sp[33]	1.0	10012	2.1	9.1	-15.6	2.1	19.8
mu_a_sp[34]	1.0	10012	0.5	9.0	-17.5	0.5	18.6
mu_a_sp[35]	1.0	10012	-3.2	8.5	-19.6	-3.2	13.4
mu_a_sp[36]	1.0	10012	-6.5	9.2	-24.6	-6.5	11.6
mu_a_sp[37]	1.0	10012	-2.3	9.1	-20.1	-2.2	15.9
mu_a_sp[38]	1.0	10012	6.5	8.7	-10.3	6.5	23.6
mu_a_sp[39]	1.0	10012	-1.8	8.5	-18.5	-1.8	14.7
mu_a_sp[40]	1.0	10012	2.5	8.7	-14.4	2.5	19.8
mu_a_sp[41]	1.0	10012	-3.5	8.7	-20.5	-3.6	13.3