

Appendix 1

Supplementary Table 1. List of post-fire regeneration strategy and SLA for species found in study plots. or, obligate resprouters; fr, facultative resprouters; os, obligate seeders.

Species	Post-fire regeneration strategy	SLA (mm ² mg ⁻¹)
<i>Adenostoma fasciculatum</i>	fr	3.53
<i>Adenostoma sparsifolium</i>	fr	6.59
<i>Aesculus californica</i>	fr	23.3
<i>Arbutus menziesii</i>	or	7.81
<i>Arctostaphylos andersonii</i>	os	4.87
<i>Arctostaphylos auriculata</i>	os	3.88
<i>Arctostaphylos crustacea</i>	fr	4.28
<i>Arctostaphylos crustacea</i> ssp. <i>crinita</i>	fr	4.16
<i>Arctostaphylos cruzensis</i>	os	3.97
<i>Arctostaphylos glandulosa</i>	fr	3.32
<i>Arctostaphylos glandulosa</i> ssp. <i>cushingiana</i>	fr	3.06
<i>Arctostaphylos glauca</i>	os	3.73
<i>Arctostaphylos hookeri</i> ssp. <i>hearstiorum</i>	os	3.69
<i>Arctostaphylos hookeri</i> ssp. <i>hookeri</i>	os	3.74
<i>Arctostaphylos imbricata</i>	os	4.05
<i>Arctostaphylos manzanita</i>	os	3.89
<i>Arctostaphylos manzanita</i> ssp. <i>laevigata</i>	os	2.79
<i>Arctostaphylos montereyensis</i>	os	3.93
<i>Arctostaphylos pajaroensis</i>	os	4.87
<i>Arctostaphylos pilosula</i>	os	5.6
<i>Arctostaphylos pumila</i>	os	4.18
<i>Arctostaphylos purissima</i>	os	4.82
<i>Arctostaphylos rudis</i>	fr	4.34
<i>Arctostaphylos sensitiva</i>	os	4.27
<i>Arctostaphylos silvicola</i>	os	3.79
<i>Arctostaphylos tomentosa</i> ssp. <i>tomentosa</i>	fr	3.83
<i>Arctostaphylos virgata</i>	os	7.13
<i>Arctostaphylos viscida</i> ssp. <i>viscida</i>	os	4.01
<i>Baccharis pilularis</i>	or	12.6
<i>Ceanothus cuneatus</i> var. <i>cuneatus</i>	os	5.17
<i>Ceanothus cuneatus</i> var. <i>fascicularis</i>	os	4.94
<i>Ceanothus cuneatus</i> var. <i>rigidus</i>	os	4.64
<i>Ceanothus foliosus</i> var. <i>medius</i>	os	6.21
<i>Ceanothus integerrimus</i>	fr	16.97
<i>Ceanothus jepsonii</i>	os	3.55
<i>Ceanothus leucodermis</i>	fr	4.96
<i>Ceanothus oliganthus</i>	fr	6.78
<i>Ceanothus papillosus</i>	os	7.27
<i>Ceanothus prostratus</i>	os	4.33
<i>Ceanothus thyrsiflorus</i>	os	8.94
<i>Cercocarpus betuloides</i>	or	10.02

<i>Chrysolepis chrysophylla</i> var. <i>chrysophylla</i>	or	6.47
<i>Cupressus macnabiana</i>	os	4.88
<i>Cupressus sargentii</i>	os	8.5
<i>Dendromecon rigida</i>	fr	5.62
<i>Ericameria ericoides</i>	or	5.39
<i>Ericameria linearifolia</i>	or	4.78
<i>Eriodictyon californicum</i>	fr	4.74
<i>Eriogonum fasciculatum</i>	fr	5.45
<i>Eriophyllum confertiflorum</i>	or	17.22
<i>Eriophyllum stachaedifolium</i>	or	14.73
<i>Fraxinus dipetala</i>	or	5.92
<i>Galium porrigens</i>	or	40.54
<i>Garrya congdonii</i>	or	3.94
<i>Garrya elliptica</i>	fr	3.65
<i>Garrya fremontii</i>	or	4.43
<i>Genista monspessulana</i>	fr	27.54
<i>Heteromeles arbutifolia</i>	or	4.13
<i>Keckiella breviflora</i>	or	13.09
<i>Lepechinia calycina</i>	or	45.13
<i>Lotus scoparius</i>	os	10.52
<i>Mimulus aurantiacus</i>	fr	11.62
<i>Monardella villosa</i>	or	7.23
<i>Pickeringia montana</i>	or	10.43
<i>Pinus attenuata</i>	os	8.21
<i>Pinus radiata</i>	os	5.26
<i>Pinus sabiniana</i>	os	3.37
<i>Prunus ilicifolia</i> ssp. <i>ilicifolia</i>	or	5.62
<i>Quercus agrifolia</i> var. <i>agrifolia</i>	or	6.04
<i>Quercus berberidifolia</i>	or	7.47
<i>Quercus chrysolepis</i>	or	6.57
<i>Quercus douglasii</i>	or	8.87
<i>Quercus durata</i> var. <i>durata</i>	or	4.58
<i>Quercus wislizenii</i>	or	6.33
<i>Rhamnus californica</i> ssp. <i>californica</i>	or	10.26
<i>Rhamnus crocea</i>	or	10.9
<i>Rhamnus ilicifolia</i>	or	8.46
<i>Ribes malvaceum</i>	or	15.59
<i>Rosa gymnocarpa</i>	or	38.09
<i>Salvia mellifera</i>	or	5.54
<i>Sequoia sempervirens</i>	or	6.97
<i>Solanum parishii</i>	or	23.99
<i>Solanum umbelliferum</i>	or	16.1
<i>Symphoricarpos mollis</i>	or	15.38
<i>Toxicodendron diversilobum</i>	or	24.49
<i>Umbellularia californica</i>	or	8.06
<i>Vaccinium ovatum</i>	or	10.7

Supplementary Table 2. Correlation of climate zones with climate variables. Reported values are means \pm one standard deviation and *P* values from one-way ANOVA of each climate variable with climate zone (interior and maritime).

Variable	Interior	Maritime	<i>F</i>	<i>P</i>
Relative humidity (%)	62.7 \pm 2.6	70.5 \pm 2.7	76.0	<0.001
Potential evapotranspiration (cm)	124.3 \pm 74.4	105.4 \pm 82.9	49.2	<0.001
Annual temperature ($^{\circ}$ C)	6.3 \pm 1.2	7.0 \pm 5.0	1.9	0.183
Minimum winter temperature ($^{\circ}$ C)	1.5 \pm 1.2	4.1 \pm 1.0	48.7	<0.001
Maximum summer temperature ($^{\circ}$ C)	30.6 \pm 2.6	23.8 \pm 1.7	81.8	<0.001
Temperature seasonality (standard deviation of monthly temperature)	495.2 \pm 85.7	291.2 \pm 64.0	63.1	<0.001
Annual precipitation (cm)	58.9 \pm 14.3	64.1 \pm 26.9	0.5	0.479
Winter precipitation (cm)	115.3 \pm 31.8	130.2 \pm 54.5	1.0	0.325
Summer precipitation (cm)	1.0 \pm 0.6	1.4 \pm 1.1	2.0	0.325
Precipitation seasonality (coefficient of variation of monthly precipitation)	87.5 \pm 2.9	88.0 \pm 2.1	0.3	0.566

Notes: *F* statistics degrees of freedom for central coast are 1 and 33 for the factor and the residuals, respectively.

Appendix 2

Phylogenetically independent contrast analysis of the correlation of post-fire regeneration strategy and SLA.

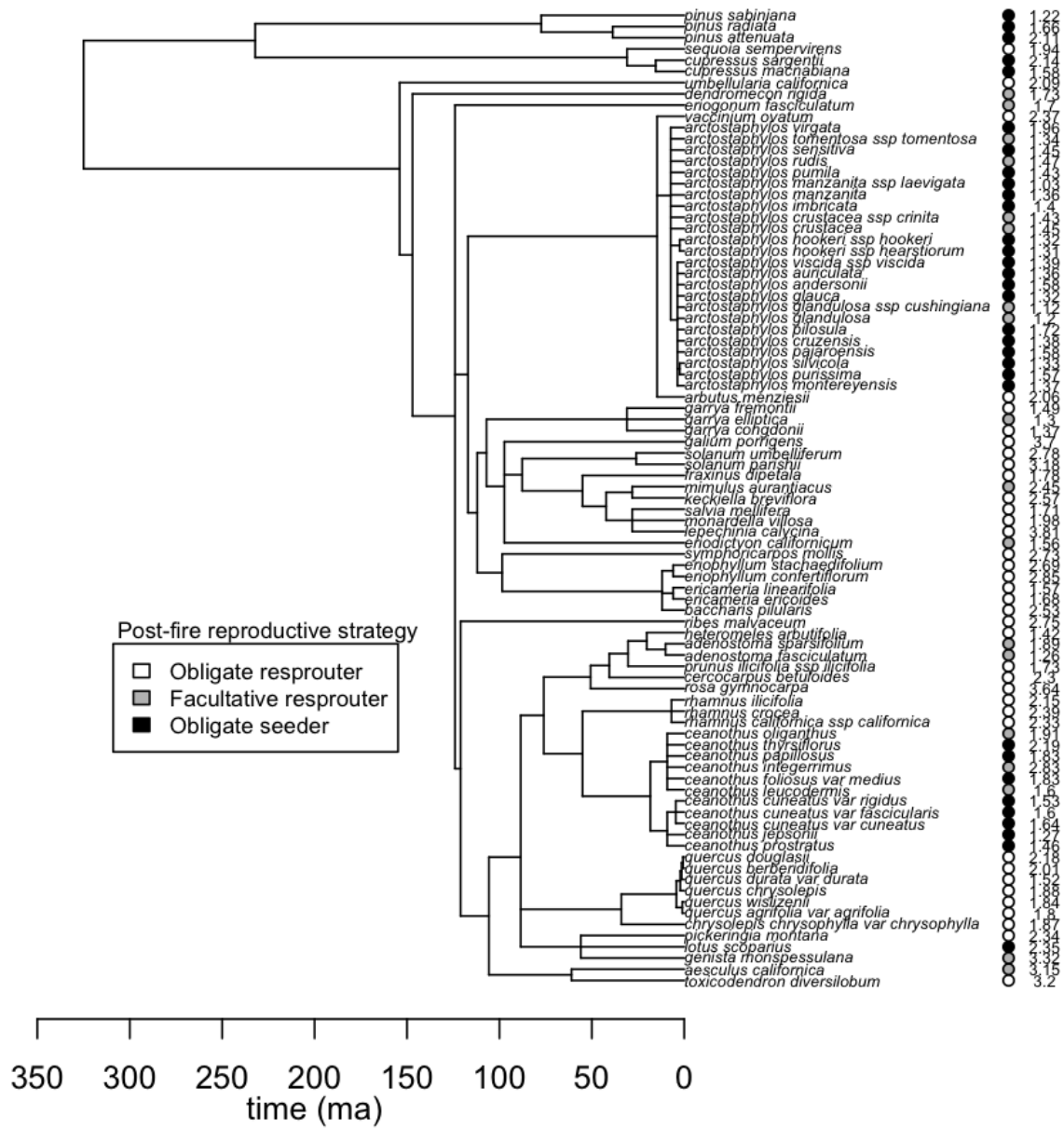
To calculate phylogenetically independent contrasts of transitions in post-fire regeneration strategy (ternary) and log(SLA) (continuous), we first created a phylogeny for the full species pool ($n = 87$) using Phylomatic (Webb and Donoghue 2005) with the maximally resolved seed plant tree as a backbone and *bladj* module of Phylocom to create branch lengths in millions of years (Webb et al. 2006). Additional phylogenetic resolution was added ‘by hand’ using published phylogenies for *Ceanothus* (Anacker et al. 2011), *Quercus* (Pearse and Hipp 2009), *Pinus* (Gernandt et al. 2005), *Rosaceae* (Potter et al. 2007), and *Arctostaphylos* (Boykin et al. 2005) (Figure 1).

To calculate the contrasts, we used the Brunch algorithm of ‘comparative analysis by independent contrasts’ (CAIC) as implemented in R (Purvis and Rambaut 1995). We used the branch lengths provided by *bladj*, rather than setting all branch lengths equal to zero, and used standardized contrast values, where the contrast value is divided by the square root of the sum of the two subtending branch lengths. Contrasts were calculated as $\log(\text{SLA})_{\text{obligate seeder}} - \log(\text{SLA})_{\text{facultative resprouter}}$ and $\log(\text{SLA})_{\text{obligate seeder}} - \log(\text{SLA})_{\text{obligate resprouter}}$.

A linear model of the resulting contrasts showed the relationship between log(SLA) and post-fire regeneration strategy was not significant after accounting for phylogenetic non-independence ($F_{1, 12} = 1.1$, $P = 0.327$).

References

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Supplementary Figure 1. Phylogenetic tree of 87 species found in the study plots with trait information at the tips. Values at the right are $\log(\text{SLA})$ ($\text{mm}^2 \text{mg}^{-1}$).