**Supplemental Information for “Tropical secondary forest enrichment using giant stakes of keystone figs”**

**Appendix S1. Evaluation of relationship between sprouting and wood specific gravity in seven *Ficus* species**

We expected that fig stake sprouting capacity would be greater for fig species with lower wood specific gravity. Trees with high wood specific gravity are likely to be resistant to damage from disturbances, like windstorms, but species with low wood specific gravity are sometimes more resilient, and thus perhaps more likely to break and sprout from the base or from broken branches (Putz *et al.* 1983,Zimmerman *et al.* 1994,Curran *et al.* 2008). We further expected that wood specific gravity would vary more between fig species than within fig species, which is a prerequisite for any useful predictive relationship.

In January 2016, wood samples were taken with an increment borer from 36 wild-growing *Ficus* individuals located within 7 km of the Las Cruces Biological Station. Samples were stored at 4°C in watertight containers prior to processing at the field station. Samples were divided into 2-cm segments, weighed wet, dried for 24 hr at >101°C, and weighed dry (Chave *et al.* 2006). Specific gravity (*G*) was calculated by dividing the dry weight of each subsample by its wet volume. Mean specific gravity (*Gmean*) for each sample was calculated: , where *Gp* is the gravity at the pith, *R* is the radius of the tree, and *g* is the rate of change of specific gravity with radius (Williamson & Wiemann 2010). We used one-way analysis of variance to evaluate whether mean gravity differed among species. Analyses were done in R version 3.2 (R Core Team 2016).

We found no significant differences in wood specific gravity between seven fig species (F6,29 = 0.6, *P* = 0.7), precluding any species-level correlation between specific gravity and sprouting.

Table S1. Wood samples taken for measuring specific gravity.

|  |  |
| --- | --- |
| Species | No. samples |
| *F. americana* | 7 |
| *F. colubrinae* | 6 |
| *F. costaricana* | 5 |
| *F. hartwegii* | 4 |
| *F. macbridei* | 5 |
| *F. obtusifolia* | 4 |
| *F. tonduzii* | 5 |

C:\Users\lreid\Desktop\OTS Wood Specific Gravity ANOVA 2017-04-14\Fig Specific Gravity Barplot.tif

Figure S1. Mean specific gravity (± 1 standard error) of seven *Ficus* species in southern Costa Rica.

Literature cited

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