

**Supplementary Materials:** The following are available online at [www.mdpi.com/xxx/s1](http://www.mdpi.com/xxx/s1)

**Table S1.** Probability (Pr > F) for testing treatment effect with PROC MIXED in SAS for various carbon pools at age 28 and 54 in a ponderosa pine plantation grown under overstory planted at 1.8, 3.7, and 5.5 m spacing plots, which are split with competing vegetation control (VC) and non-control (NVC) subplots in Challenge Experimental Forest, California, USA.

Source of variation	Num DF /Den DF	O horizon*	Woody debris*	Forest floor*	Competing vegetation*	Live planted pines	Mortality	Planted pine trees	Total ecosystem C
Mg ha <sup>-1</sup>									
<u>Age 28</u>									
Space									
Veg control	2/2	0.592	0.153	0.674	0.183	0.295	No mortality	Same as live trees	0.328
Space x Veg	1/3	0.021	0.371	0.032	0.002	0.036			0.047
control	2/3	0.165	0.379	0.204	0.420	0.477			0.920
<u>Age 52</u>									
Space									
Veg control	2/2	0.092	0.822	0.094	0.577	0.586	0.060	0.855	0.928
Space x Veg	1/3	0.643	0.003	0.461	0.001	0.709	0.419	0.583	0.361
control	2/3	0.075	0.022	0.067	0.015	0.800	0.751	0.701	0.799

\* Variables were log-transformed before the analysis. Red and bold numbers highlight a significant treatment effect. Yellow highlights are those tests with 0.05 < P < 0.08.

**Table S2.** Probability (Pr > F) for testing treatment effect with PROC MIXED in SAS for soil carbon at age 28 and 54.

Source of variation	Num DF /Den DF	28-yr soil C	52-yr soil C
Space	4/4	0.306	0.645
Veg control	1/15	0.816	0.026
Space x Veg control	4/15	0.066	0.299
Depth	1/15	0.018	0.001
Space x depth	4/15	0.644	0.141
Veg x depth	1/15	0.667	0.114
Space x veg x depth	4/15	0.459	0.477

Red and bold numbers highlight a significant treatment effect. Yellow highlights are those tests with 0.05 < P < 0.08.