

Sudden oak death-induced tanoak mortality in coast redwood forests: Current and predicted impacts to stand structure

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Supplementary Material

Table S1. Means, standard deviations, and significance classes for *observed* groups. Within each row, groups that do not share a letter were significantly different in Tukey's HSD tests. All analyses included second-growth plots only. "NN Diffs" = nearest neighbor differences.

	Healthy	Diseased	No-Tanoak
Total Stems (# / ha)	595.5 ± 49.3 a	438.0 ± 72.8 a	442.5 ± 125.2 a
Total BA (m ² / ha)	103.8 ± 10.7 ab	69.3 ± 14.2 a	145.7 ± 37.8 b
Mean DBH (cm)	38.5 ± 4.0 a	37.0 ± 6.7 a	54.3 ± 16.0 a
Mean Height (m)	26.7 ± 4.7 a	24.9 ± 6.5 a	36.7 ± 14.4 a
Mean HLC (m)	14.1 ± 2.7 a	13.7 ± 3.4 a	19.9 ± 9.3 a
Mean Crown Length (m)	12.6 ± 2.4 a	11.2 ± 3.3 a	16.8 ± 5.4 a
Mean Crown Ratio	0.458 ± 0.040 a	0.447 ± 0.032 a	0.450 ± 0.072 a
Mean NN Diffs: DBH (cm)	23.8 ± 3.0 a	25.8 ± 3.0 a	37.5 ± 5.1 b
Mean NN Diffs: Height (m)	11.9 ± 2.5 a	12.8 ± 4.0 a	16.2 ± 3.9 a
Mean NN Diffs: HLC (m)	6.1 ± 1.0 a	7.2 ± 2.9 a	9.0 ± 3.9 a
Mean NN Diffs: Crown Length (m)	7.3 ± 2.0 a	7.4 ± 2.6 a	11.2 ± 2.8 a
Mean NN Diffs: Crown Ratio	0.130 ± 0.025 a	0.157 ± 0.015 a	0.153 ± 0.017 a
C&E Aggregation Index	0.93 ± 0.05 a	0.69 ± 0.12 b	0.83 ± 0.06 ab

Table S2. Means, standard deviations, and significance classes for *inferred* groups. Within each row, groups that do not share a letter were significantly different in Tukey's HSD tests. All analyses included second-growth plots only. "NN Diffs" = nearest neighbor differences.

	0% mortality	100% mortality	No-Tanoak
Total Stems (# / ha)	724.3 ± 192.6 a	286.3 ± 82.0 b	442.5 ± 125.2 b
Total BA (m ² / ha)	99.0 ± 13.2 a	75.3 ± 15.7 a	145.7 ± 37.8 b
Mean DBH (cm)	34.8 ± 5.3 a	50.8 ± 11.9 b	54.3 ± 16.0 b
Mean Height (m)	24.8 ± 4.6 a	30.5 ± 7.3 a	36.7 ± 14.4 a
Mean HLC (m)	13.3 ± 2.3 a	15.9 ± 4.0 a	19.9 ± 9.3 a
Mean Crown Length (m)	11.5 ± 2.4 a	14.6 ± 3.9 a	16.8 ± 5.4 a
Mean Crown Ratio	0.451 ± 0.025 a	0.459 ± 0.046 a	0.450 ± 0.072 a
Mean NN Diffs: DBH (cm)	20.9 ± 3.2 a	33.5 ± 11.2 b	37.5 ± 5.1 b
Mean NN Diffs: Height (m)	10.8 ± 2.6 a	14.2 ± 3.3 ab	16.2 ± 3.9 b
Mean NN Diffs: HLC (m)	5.8 ± 1.5 a	6.5 ± 2.3 a	9.0 ± 3.9 a
Mean NN Diffs: Crown Length (m)	6.4 ± 2.0 a	9.2 ± 2.5 ab	11.2 ± 2.8 b
Mean NN Diffs: Crown Ratio	0.120 ± 0.022 a	0.149 ± 0.032 a	0.153 ± 0.017 a
C&E Aggregation Index	0.86 ± 0.11 a	0.60 ± 0.20 b	0.83 ± 0.06 ab

Table S3. Means, standard deviations, and significance levels for *predicted* intra-plot changes. P-values are from one-sample t-tests assessing whether intra-plot differences (between 0% and 100% tanoak mortality), collectively, were significantly different from zero. All analyses included second-growth plots only. “NN Diffs” = nearest neighbor differences.

	Predicted intra-plot difference: (100% - 0% mortality)	p-value
Total Stems (# / ha)	-438.0 $\pm$ 192.0	0.001
Total BA (m ² / ha)	-23.8 $\pm$ 12.3	0.002
Mean DBH (cm)	16.0 $\pm$ 10.2	0.006
Mean Height (m)	5.7 $\pm$ 3.9	0.009
Mean HLC (m)	2.6 $\pm$ 2.1	0.016
Mean Crown Length (m)	3.1 $\pm$ 2.5	0.019
Mean Crown Ratio	0.007 $\pm$ 0.038	0.634
Mean NN Diffs: DBH (cm)	12.6 $\pm$ 10.2	0.017
Mean NN Diffs: Height (m)	3.4 $\pm$ 2.2	0.006
Mean NN Diffs: HLC (m)	0.68 $\pm$ 1.82	0.363
Mean NN Diffs: Crown Length (m)	2.9 $\pm$ 2.0	0.010
Mean NN Diffs: Crown Ratio	0.03 $\pm$ 0.04	0.097
C&E Aggregation Index	-0.26 $\pm$ 0.17	0.008