



Additional file 19: SNP evidence for hybrid.

(a) Principal components analysis of 226,423 SNPs from 24 *Quercus* samples, showing the 22 *Q. lobata* samples (clustered in the the lower right), the *Q. garryana* individual (in the lower left), and the probable *Q. lobata*–*Q. douglasii* hybrid individual (at the top); and **(b)** proportion of heterozygous genotype calls at SNPs for *Q. lobata* (blue), *Q. garryana* (green), and Springville 1 (red, the probable hybrid), with samples ordered left-to-right by latitude south-to-north.