Supplementary Material

Terrestrial LiDAR Methods

The GeoSLAM Zeb-Revo is a convenient method for terrestrial LiDAR collection as it requires little time and minimal set up. However, without a georeferenced base station, only qualitative interpretation of stand structure change can be concluded. Automated scanning in the X-Y plane allows for rich datasets at low to mid level fuels. Manual control in the Z plane presents a significant limitation in mid to upper level fuel modelling. Thus, we have excluded analysis of any lidar returns over 5.0 m, which represented less when 2% of all returns. Burning peat led to a change in the relative elevation of the ground surface, although this change averaged approximately 0.05 m (Figure 6a) and had little effect on the quality of the height

Data from the nine sample plots show an increase in the proportion of ground returns (returns below 0.15 m), potentially due to thinning of the understory by fire (Figure A1). This thinning, which is reflected in the proportion returns from 0.15 m to 1.37 m, allowed more lidar strikes to hit the ground surface relative to pre-fire conditions. Similarly, the proportion returns from 1.37 m to 3.0 m and proportion returns 3.0 m to 5.0 m were also reduced relative to pre-fire conditions. The degree of this reduction is a relative measure of residual biomass, with trees left standing still accounting for a significant proportion of the overall lidar returns.