

Establishment of a Set of Wildfire Chronosequence Benchmark Plots in Southern Tasmania

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The Wildfire Chronosequence Project is a joint initiative of the Bushfire CRC, the University of Tasmania (School of Plant Science) and Forestry Tasmania. The overall aim of the project is to investigate successional processes in the fire-adapted wet eucalypt forest landscape of southern Tasmania, to enable the development of methods for managing structural complexity and fire-dependent biodiversity in the production forest landscape and adjacent protected areas. The project incorporates a set of permanent research plots in forest regrowing following past stand-replacing disturbance events (wildfire or timber harvesting). There are six disturbance treatments in total, each represented by a 50 x 50 m plot (with 100 m external buffer) on a northerly to westerly aspect and another on a southerly to easterly aspect. These encompass regrowth forest following wildfires in 1898, 1934 and 1966/67, as well as equivalent plots in forest that has not experienced wildfire for over 150 years (old-growth) and forest regenerating following clearfell, burn and sow silviculture in 1966 and 2000. Six of the sites are within the Warra Long Term Ecological Research (LTER) site, with the remaining six sites within an adjacent area of State Forest recently designated as an Experimental Forest Landscape. For each of these twelve sites, stand structural, coarse woody debris and biodiversity surveys are being undertaken; further collaborative research by interested individuals or agencies is encouraged. This poster outlines the process of site selection and establishment, presents some preliminary interpretations of the stand structural data, and considers future research directions.