

FIRE COUNTRY

Biophilic and indigenous innovations for fire resilience

Project location: Anglesea, Victoria, Australia

ABSTRACT

Fire is an integral part of the Australian landscape. For thousands of years, Indigenous Australians utilised fire as a tool to shape the landscape, increasing productivity and improving biodiversity, and minimise the ferocity of wildfires. Today, many of Australia's ecosystems depend on infrequent fires to support regeneration and growth. Following the 2019-20 Black Summer bushfires, indigenous fire management is growing in interest and awareness.

European settlement dislocated indigenous communities, preventing their custodianship of land and disrupting this form of land management. The eventual decline of ecosystems, soil quality and exacerbated hazardous fire conditions was recognised even among earlier settlers. Settlement patterns and land management in Australia have since evolved in response to the increased risk of bushfire. In Australia's planning systems, fire is a threat that needs to be either prevented or kept away from settlements, a mindset which treats nature itself as a threat. This perception exacerbates a growing disconnect between humans and biodiversity in Australian cities and towns.

This thesis explores the opportunities for integrating indigenous fire management practices with landscape architecture and urban design in a fire prone landscape of South-Eastern Australia. The project specifically explores the rehabilitation of the former Anglesea Coal Mine and surrounding Anglesea Heathland, presenting an opportunity to adopt biophilic management and design principles that can strengthen the bushfire resilience of local ecosystems and infrastructure. Ultimately, this thesis proposes a new model of biophilic design that integrates indigenous fire and water management in a built environment that seeks to actively support ecosystem services and a sustainable economy.