TO BURN OR NOT TO BURN?

The following photo essay may provide a different perspective on the questions as to whether we burn and if we do burn, how often. Perhaps the relevant question is not whether we burn but how do we burn.

Photo 1: Part of a fuel reduction burn (FRB) undertaken in April 2016. Fire had been excluded from this area of native forest for about 20 years, before fire was reintroduced in May 2010. A second low intensity burn was undertaken in May 2013 and the third in April 2016. During the three burns, part of the area had burnt three times, some had burnt twice, some once and a gully and surrounds in the middle of the block had not burnt at all.

On 4 January 2020, the Border Fire, which travelled a distance of about 38 kilometres from the Victorian Border to the outskirts of Eden passed through this fuel reduced area.

Photo 2: Taken on 7 January 2020 shows the aftermath of the fire. The whole area had been burnt by a ground fire. Crown scorch was limited to the understorey plants. Fire had burnt up the trunks of rough barked species but the canopy of the mature trees was not scorched.

Photo 3: Taken on 7 January 2020 shows the previously unburnt gully, where the understorey was scorched and coarse woody debris burnt, while the eucalypt canopy remained green.

Photo 3: Taken on 7 January 2020 shows an area thinned in 2010 and subject to the same burning regime as that shown in the earlier photos.

Photo 5: Taken on 20 April 2021 shows a Red Bloodwood (Corymbia gummifera) in flower, 15 months after the Border fire. Other bloodwoods within the FRB area were also flowering.

Photo 6: Taken on 20 April 2021 shows an area of forest immediately adjacent to the HRB area, that had not been fuel reduced for over 20 years. It is unlikely any surviving trees in this area will flower in the next decade. This impact is typical of more than one million

hectares of forest with crown "fully affected" by high intensity fire in NSW in 2019-20. https://www.environment.nsw.gov.au/-/media/OEH/Corporate-Site/Documents/Parks-reserves-and-protected-areas/Fire/fire-and-the-environment-2019-20-summary-200108.pdf

If low intensity burning can reduce wildfire intensity and reduce the impact of bushfires on eucalypt flowering, are there other ecological benefits from managed burning?

Photo 7: Taken on 30 July 2013, this photo shows an area subject to a low intensity fuel reduction burn in late April 2013. Three months after the burn, it was noted that there was extensive digging disturbance. A pre burn inspection had not revealed any disturbance in the litter layer between 5 and 8 centimeters deep with a fine fuel (less than 6mm diameter) loading of 25 tonnes per hectare. A motion camera was placed to monitor activity.

Photo 8: Taken on 30 July 2013 shows a Long-nosed Bandicoot foraging for insects and fungi. Why has the low intensity burn stimulated significant bandicoot feeding activity, that was not present prior to the burn?