

# Flora

In respect to Alcoa's Proposed mining expansion

The Northern Jarrah forest has over 780 species of plants. Some are large well-known trees such as Jarrah and Marri, others are tiny forest species that most people wouldn't recognize but are still critical to a healthy forest. The Jarrah forest is part of a **threatened biodiversity hotspot**<sup>1</sup>. **To mine bauxite, all 780 species are cleared. ALCOA SAYS They rehabilitate the forest back to 100% of forest species in YOUNG rehabilitation. (June 2023)**

## OUR CONCERNS

**Some species are very difficult to establish after mining** e.g Grasstrees, Bracken fern & Snottygobble. These plants are called **"recalcitrant"** species as they can't be easily grown after mining.

**Some species are very sensitive to dieback.** The Banksia, Hakeas, Snottygobble, Eucalypts and Grasstrees are particularly susceptible to dieback. Our newer rainfall pattern with unusually high rainfall downpours may further spread and speed up dieback damage.

**Current mining fragments the forest habitat** rather than maintaining ecosystem corridors making it hard for animals to move through the forest.



Example; Grasstrees (balga, xanthorrhoea preissii) on the left



Top Image: Blue China Orchid

Bottom Image: Cowslip Orchid



**Planned Holyoake mine expansion could destroy more than 40 research plots that have been used for monitoring tree growth for up to 100 years.** These plots were created as part of the Commonwealth Regional Forest Agreement and need to continue to exist as part of the agreement, and part of an international scientific study.

**New species of plants are still being found within the forest** and there is a risk that some species will never be discovered because of the clearing. Between 50%-70% of our medicines are derived from plants so we may also be losing potential medicines.

**Drying, warming climate could result in mass collapse of areas of forest.** The long dry summer of 2010/2011 and 2023/2024 caused trees to die on the Darling scarp. Preserving as much forest as we can is critical to biodiversity and storing carbon in older mature trees.

**The long-term rehabilitation is less successful at 35 years.** New evidence in 2024 shows that early success at 12 years is not well maintained at 35 years<sup>2</sup>.

**For these reasons the DDFD believes that Alcoa's mining proposal for expansion of mine sites (Holyoake, Myara and O'Neil) and Pinjarra refinery should be rejected by the EPA.**



Example of fragmented Jarrah forest as a result of bauxite mining



Example: Newly discovered in 2019, the scented fairy orchid, *Caladenia lateritica* is restricted to just a few northern Jarrah forest plateau areas. (Photo: Kingsley Dixon)



Thousands of trees killed by drought and heatwave in 2010/11. (Photo Credit: ABC News).

**Have your say by signing on to WA Forest Alliance's submission with a quick and simple form or find out more about writing your own at [endforestmining.org.au/alcoa](https://endforestmining.org.au/alcoa). The comment period is now open and closes on 21 August 2025.**

1. Wardell-Johnson, G., Wardell-Johnson, A., Bradby, K., Robinson, T., Bateman, P. W., Williams, K., Keesing, A., Braun, K., Beckerling, J., & Burbridge, M. (2016) Application of a Gondwanan perspective to restore ecological integrity in the south-western Australian global biodiversity hotspot. *Restoration Ecology*, 24(6), 805–815. <https://doi.org/10.1111/rec.12372>
2. Campbell et al. Standards-based evaluation inform ecological restoration outcomes for a major mining activity in a global biodiversity hotspot. *Restoration Ecology* 2024-11, Vol 32(8) p.n/a, Article e14236