The 2020-2021 Annual General Meeting of the South-West Forests Defence Foundation Inc. will be held at 5.30 pm on Tuesday 14th December 2021, at 112 Eric Street, Cottesloe. Please note the starting time and venue.

The agenda is as follows:

- 1. Apologies
- 2. Minutes of previous AGM
- 3. President's report
- 4. Treasurer's report
- 5. Auditor's report
- 6. Election of office bearers and committee members for 2022
- 7. Other business

Nominations for the positions of President, Vice-president, Secretary, Treasurer and five committee members are called for.



SOUTH-WEST FORESTS DEFENCE FOUNDATION INC.

PO BOX 203, NEDLANDS WA 6009 www.southwestforestsdefence.org

NEWSLETTER - December 2021

Forest Fiestas

WAFA is hosting Forest Fiestas in Margaret River and Fremantle to celebrate our incredibly precious south-west forests and the recent breakthrough in their conservation.

The movement for the protection of the south-west's forests has reached an historic milestone. On the 8th of September, Premier McGowan committed to ending native forest logging in WA by January 2024. From here, much work remains to be done to get the details right and ensure the forests are properly and securely protected, and as we celebrate, we regenerate, recharge, and reinvigorate the forest movement.

Thanks to the heartfelt work of thousands of people over many decades, the south-west native forests' intrinsic, climate and biodiversity values are being recognised and given precedence by the State Government.

THAT is worth a party! And not just any party, but a rolling street FIESTA!

Find out more here and Please Register to help us plan.

If you donate at registration, you go in the draw to win from the \$3,000+ prize pool! If you can't make the events you can still contribute and go in the draw to win by donating to the crowd fund. Each FREE public event has a line up of seriously amazing local musicians and excellent quality sound, an eclectic mix of performers, food vans and extra special smoking ceremonies. The prizes are super exciting and generous, with a massive thanks to the sponsors.

Margaret River/Wooditchup Sun 12 Dec, Memorial Park, Wilmott Ave, 3pm-8.30pm

Fremantle/Walyalup Fri 17 Dec, Pakenham St, 6.30pm-11pm

We hope to bring together as many people as possible, so please join us and bring your friends, we're really looking forward to celebrating with all of you.

Editorial

We in the Foundation along with many others welcomed Premier McGowan's September announcement that logging of WA's native forests would end from 2024 and that all two-tier karri forest would be protected immediately, and we were happy to express our gratitude. Read the media release here.

The news came as a surprise, no doubt helped by the survey conducted for Environment Minister Sanderson of attitudes to native forest logging.

This found that the vast majority of respondents opposed logging at current levels and wanted more native forest protected and less available for logging. You can read the report, "The value and use of Western Australia's native forests now and into the future" here.

In addition, we welcomed the news that the Government would allocate \$50 million to a Just Transition Plan to support affected workers and communities, and \$350 million to expand WA's softwood timber plantation.

The Government has finally recognised the ever increasing impacts of climate change, the importance of maintaining biodiversity and forest health, the need for carbon capture and storage, and declining timber yields. It's an acknowledgement that our forests have not been managed sustainably.

But it's not all good news. The logging lobbyists are planning (with government acquiescence) to thin regrowth as though thinning isn't logging, and the Government and its agencies don't even question the frequent extensive prescribed burning of our forests despite its harmful impacts on biodiversity and forest health and massive release of carbon.

From 2024, the Government says that timber taken from our native forests will be limited to forest management activities alleged to improve forest health (i.e., thinning), and clearing for mining operations, such as Alcoa's, approved by the Government but not the community. We now have to prevent thinning and rein in Alcoa.

So there is work to be done, and the SFDF's 46-year-long campaign for good management of our forests must continue.

The case against thinning regrowth

The propaganda campaign to practise extensive thinning of regrowth has begun with its proponents giving it an appealing name: ecological thinning.

There is nothing 'ecological' about thinning jarrah, karri and marri regrowth. It is just another excuse to chop down trees to keep a few people in their jobs and produce low-grade logs for sale to anyone who will buy them for any purpose that can be found. One proposal is to burn them as so-called 'renewable energy' although burning wood releases more CO₂ than burning coal and,

after 150 years of over-exploitation, our forests will take centuries to renew themselves once all logging stops.

In the past, foresters thinned regrowth to increase the growth rate of the retained trees for future sawlog production. This no longer applies because native forest logging, historically conducted for sawlog production, will end as of 2024.

In any event, thinning of WA's native forests is unnecessary as jarrah and karri forests self thin over time. Not only is it unnecessary. It is counterproductive.

With the usual jarrah logging practices of gap creation and shelterwood, the soil in 12 per cent of the logging coupes is compacted by extraction tracks and log landings. If the thinning is commercial and the thinned trees are sold, machines will be used to take the logs to log landings and may cause further soil compaction.

Soil compaction and disturbance potentially threaten biodiversity and the productive capacity of forests —an outcome of reducing soil porosity, which affects soil biota and processes such as soil aeration, infiltration and nutrient cycling, which are fundamental to forest health.

Research by CALM scientists has found that soil in the jarrah forest that has been compacted by logging takes at least 50 years to return to its pre-logging condition.

Following thinning, thinned stands are burnt in either a mild intensity silviculture burn or integrated into adjoining prescribed burns. This releases large amounts of stored carbon.



Thinned and burnt jarrah forest. Photo Ken Waterhouse

Impacts on soil quality are most pronounced on sites disturbed by logging and burning. These soils have significantly lower values of a range of ecologically important measures at multiple depths, including available phosphorus and nitrate. This can have major ecological and functional implications.

Past trials have shown that it is impossible to log without introducing Phytophthora dieback. Furthermore, by opening up the canopy and allowing more rain and sunlight to reach the soil, thinning increases the spread of the disease.

Disturbance caused by logging and burning increases the likelihood that marri trees will be attacked by the marri canker fungus, which is killing marri trees across their range. The consequences of marri canker infestation for fauna such as cockatoos, which need marri habitat, and for the honey industry, which relies heavily on marri blossom, are catastrophic.

In the past, thinning was done 'from below' - the trees least likely to produce future sawlogs were killed by poisoning, ringbarking or felling to increase the growth rate of the retained trees. If the proposed thinning is still to be done from below and trees most likely to produce hollows in 100 years or more are removed, the thinned forest will not provide much habitat for the large numbers of birds and marsupials in our forests that need hollows in standing trees for shelter and breeding.

Thinning to increase run-off into streams and rivers works for a short time but is of no long-term benefit. And nothing will increase run-off if it doesn't rain.

Now it is up to community members and groups such as SFDF to convince the community and the Government that thinning is logging of no ecological benefit and should end when logging ends.

The case against Alcoa expansion

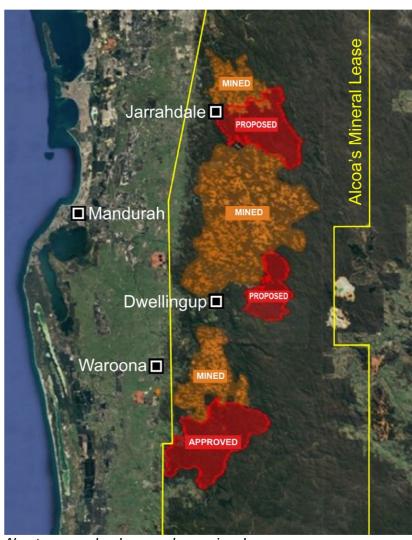
The Alcoa (Alumina Company of America) of Australia has an historic State Agreement Mineral Lease of 702.262 hectares that dates back to 1961.

In the 1961 debate on the Alumina Refinery Agreement Bill, then Minister for Industrial Development, Charles Court, said that Alcoa would clear 25 acres (10 hectares) per annum. Its current annual rate of clearing is 735 hectares.

In 1979, Barry Carbon, then working for CSIRO and later chair of WA's EPA, said that the jarrah forest in the Darling Range was doomed, destroyed by bauxite mining combined with earlier clearing for agriculture and dieback disease.

The total area mined to December 2019 was 26,311 hectares, all of it in native forest. Of this, 20,381 hectares had been 'rehabilitated', 16,419 hectares with jarrah forest species and 3,961 with pine or eastern states eucalypts.

Forest is lost for mines, haul roads, Residue Disposal Areas and long overland conveyors, and the remaining forest is fragmented into patches dispersed across the landscape. Fragmentation reduces native species richness, increases exotic species richness and exposes the patches to the edge effect (disruption to ecological



Alcoa's approved and proposed expansion plans

processes with air, soil and light conditions varying between edges and the interior in forest fragments).

No one mentions how much of our precious and diminishing water resources Alcoa uses in its operations.

The company now wants to expand.

The expansion Proposal comprises the following components:

- an increase in alumina production at the Pinjarra Alumina Refinery by 5 percent, from 5.0 Mtpa to 5.25 Mtpa;
- a transition of the Huntly mine into the Myara North and Holyoake regions; and
- an increase in the rate of mining within its mining lease to supply up to 2.5 Mtpa of bauxite for export. (Alcoa began exporting bauxite in June 2016).

The expansion would involve clearing 8,700 hectares of forest surrounding Dwellingup, Serpentine and Jarrahdale. Their residents are protesting about the proposed expansion and the consequent loss of their forest surrounds and its amenity and biodiversity values, carbon storage capacity and tourism potential.

The Environmental Protection Authority has decided that the proposal will go through the highest level of environmental and public scrutiny, a Public Environmental Review (PER).

The Dwellingup Discovery Forest Working Group is asking Western Australians to join them in opposing the expansion and take the opportunity to voice their concerns in a submission to the EPA and mail.



Bauxite mining in the jarrah forest, Photo: Bushfire Front

They are asking the EPA to review public submissions and not allow Alcoa to expand.

Like the Working Group, we in the SFDF have had enough of Alcoa and the desecration of our forests over the length of the Darling Range for the last 60 years.

Alcoa may have had a social licence 60 years ago, before people realised what it would do to the world's only jarrah forest. It is unlikely to have a social licence today and should not be allowed to expand.

Saving what's left of our native vegetation

In August, the Department of Water and Environmental Regulation released a consultation draft for a *Native vegetation policy for Western Australia*. This is the latest in a long series of draft documents by the Federal and WA Governments on the management of various aspects of Australia's unique and threatened biodiversity. Few if any have been finalised. None has been successfully implemented, and increasing numbers of flora and fauna species are becoming increasingly threatened.

The development of a native vegetation policy is a welcome attempt by the McGowan Government to improve the management and protection of native vegetation. However, many factors are not addressed in the draft policy impact on native vegetation: the ever increasing human population, land use planning, and the drive to extract economic value from native vegetation.

Since changes in these areas are unlikely, the outlook for native vegetation in WA is bleak.

The draft policy displays a pro-disturbance bias. For example, it alludes to 'ecological thinning' as though this is what it claims to be, and 'fuel-mitigation programs' when there should be 'risk-mitigation programs'.

The native vegetation policy should include:

- assessment of the area and condition of all remaining native vegetation;
- protection and ecological management of all remaining native vegetation;
- release of all relevant data to NGOs and community members at no cost;
- end of all clearing (especially in the Wheatbelt and on the Swan Coastal Plain);
- end/reduction of the number of exemptions from the clearing regulations;
- cooperation and collaboration among all levels of government, relevant government

departments and agencies with NGOs and community members;

- full involvement of Traditional Owners who have retained, maintained or restored connection with Country in the development and implementation of management plans for Country;
- discussion of whether ecological restoration or/and ecological renovation of native vegetation is appropriate under the impacts of climate change;
- assessment of loss and degradation of native vegetation due to feral herbivores (camels, goats, donkeys, horses, cattle, pigs, deer, rabbits) and measures to be taken to control/reduce their numbers:
- assessment of loss and degradation of native vegetation due to endemic and introduced pathogens (e.g., Armillaria in karri, Quambalaria in marri, various Phytophthora species in a wide range of native vegetation) and measures to be taken to control them and mitigate their impacts;
- adequate funding and resources to carry out the policy;
- well publicised KPIs and targets that are met, not kicked down the road.

We await with interest and some concern the outcome of the consultation process.

Biodiversity Conservation (Exemptions) Amendment Order 2021

In a very revealing coincidence, at the same time as public input is being sought on a government policy to improve the management and protection of native vegetation, the Minister for Environment amended regulations under the Biodiversity Conservation Act so that DBCA and other landholders who undertake bushfire mitigation or suppression activities (e.g., burning) in areas containing threatened species are exempt from penalties that apply to:

- the destruction of threatened flora and fauna;
- disturbance of threatened fauna: or
- · modification of threatened ecological communities.

The exemption does not apply in the case of fire hazard reduction burning within six years of a previous fire. This means that if the threatened flora, fauna or ecological community was burnt seven or more years ago, it can be burnt again for bushfire mitigation or suppression purposes with impunity.

This exemption is an assault on native vegetation and must be repealed.

The case for an inquiry into prescribed burning

Fire and Biodiversity WA (FaBWA) has sent a petition to the Standing Committee on Environment and Public Affairs calling for an independent inquiry into prescribed burning conducted by the Department of Biodiversity, Conservation and Attractions (DBCA). Here is a shortened version of its reasons for wanting an inquiry. https://www.fabwa.org.au/

Current prescribed burn environmental objectives

The south-west of WA is an internationally recognised mega-diverse biodiversity hotspot with a large percentage of endemic species under a high level of threat. Between 1999-2018, fauna species on WA's threatened species list in the south-west forest region increased from 19 to 42 and flora increased from 79 to 113.

DBCA is responsible for fire management in this biodiversity hotspot. As part of its environmental objectives it claims that, from a biodiversity perspective, prescribed burning (PB) is undertaken to maintain a range of wildlife habitat types and protect threatened species, while conserving the resilience of ecosystems. However, large areas within this 'hotspot' are ignited frequently and/or in adjoining blocks, with high severity burns and extensive

tree canopy scorch, in contravention of DBCA protocols. Its preferred method of aerial ignition affords few escape routes for fauna.

Current PB aims to keep at least 45 per cent of the landscape managed by DBCA in the south-west forest region with a 'fuel age' of less than six years. This leaves very few longer unburnt areas required for specific flora and fauna species. In the south-west, there are fire-sensitive ecosystems, such as wetlands, peat swamps, granite outcrops and riparian zones. In recent years, the implementation of extensive, severe PB has destroyed several of these vulnerable communities.

There is little confidence that PB in the conservation estate meets stated ecological objectives to conserve biodiversity and protect the resilience of ecosystems and the unique flora and fauna within these refuges. In fact, the conservation estate is burnt more frequently than State forest.

Research, monitoring and evaluation of prescribed burn ecological impacts

We do not know whether DBCA monitors before and after PB or evaluates its impact on ecosystems. Certainly, results for such research are not publicly available. Nor do we know if monitoring is of sufficient duration to determine appropriate recovery time for species.

The lack of confidence in monitoring by DBCA was implicit in the publicity around a PB in Perup with its badly impacted numbat population. Department response to the publicity about this burn made it clear that its impacts on fauna were unknown.

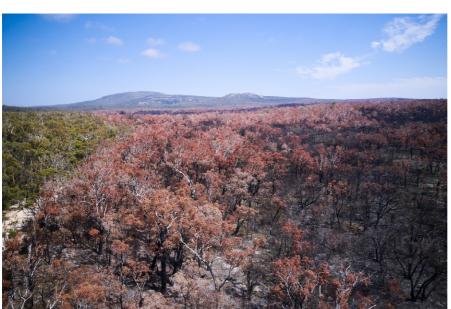
There are numerous such examples that call for an inquiry into the quality and quantity of evaluation that DBCA has undertaken into burn outcomes, and the degree this modifies planning of PB.



Parry Beach prescribed burn in May 2020

Application of relevant recent external prescribed burn research

DBCA claims that the PB program is supported by peer-reviewed research. However, the scientific evidence in support of benefits from PB in controlling the extent of bushfires is inconsistent. In contrast, the assertion that PB based on area targets is having detrimental and irreversible impacts on threatened species and on the health and resilience of ecosystems is solidly supported by recent scientific research.



Mt Lindsay NP Denbarker prescribed burn Nov 2019. Photo R. D'Souza

Research in other regions suggests that long-unburnt vegetation may be less flammable than extensive regrowth from PB. This scenario needs urgent comprehensive investigation, given the possibility that mature habitat-rich forests may be being burnt for little return.

An inquiry would confirm whether DBCA practices are aligned with the best and most up-to-date scientific and monitoring analyses.

Adaptive management for climate change, disease, drought and wildfires.

The health of most of our ecological systems is under intense pressure from the cumulative effects of climate change, including heat waves, decreasing rainfall and episodic drought, disease, and the associated increasing risk of frequent and/or severe fires.

In particular, PB practices need to be adaptive to account for the heating and drying of the climate. Current research indicates many ecosystems will continue to be altered by climate change, which in turn can affect 'fuel' dynamics and accumulation, species composition, tree mortality, stand structure and recovery time of ecosystems after fire.

It is questionable whether there is the capacity for adaptive management in the face of these stressors, given that the driver of PB in the south-west forest management area is the annual PB target of 200,000 ha.

The restriction of flexible response posed by an area target is of specific concern for biodiversity, given large areas of the conservation estate (as distinct from 'production' forest areas) are bearing the brunt of this policy. Adaptive ecological management by DBCA needs to be independently reviewed.

Transparency, accountability and public consultation

There is a perceived lack of transparency, accountability, and consultation at many levels of PB management, ecological monitoring and outcomes surrounding PB conducted by DBCA.

Poor transparency is highlighted by the absence of a formal process for both public involvement and research collaboration, no platform for open-source data on the conservation estate, and the fact that the fire plans are only available for viewing during office hours at DBCA offices.

Accountability is in question. There is no independent auditing of PB. With the same agency responsible

for planning, implementing, and evaluating PB 'success', there is an obvious dearth of oversight.

There are no formal consultation processes, in for example the design of the 3-year burn program, the annual indicative burn program, or the planning and outcomes of individual PBs.

SFDF support for inquiry

We in the SFDF fully support an inquiry into DBCA's prescribed burning. We have long been critical of current prescribed burning and called for urgent changes. There has been no improvement. In fact, the situation has got worse. WA has created a fire industry, with hundreds, possibly thousands, of mostly men in DFES, DBCA, other government agencies, and private land owners and managers setting fire to the landscape without public consultation, independent input, oversight, monitoring or auditing. The extent and frequency of all this burning are having/will have disastrous impacts on WA's biodiversity. The effects of smoke from prescribed burns on human health have not even been considered here.

The whole issue of prescribed burning in WA merits a full investigation at the level of a Royal Commission.