

GIPPSLAND FOREST DIALOGUE

Plantations in the landscape: Scoping Paper



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WHERE AND WHEN?

The 'Plantations in the landscape' Dialogue will be held on 10-11 November in Yarram, Victoria. On Friday 10 November, we will travel through a range of natural and planted forests around Yarram and the Strzelecki hinterland, visiting pine and eucalypt plantations in different stages of development, and hearing from local forest users from a variety of backgrounds at each site. On Saturday, we will convene at the Regent Theatre, Yarram to discuss a range of issues around plantations.

INTRODUCTION

Our fourth Gippsland Forest Dialogue will focus on the theme of 'Plantations in the landscape' and what we want from and for our planted forests in the region. The Dialogue will look at what this might mean to different stakeholders and communities, and work to find actionable recommendations to achieve balanced values through the exploration of three areas: the role of plantations in landscape health and their environmental impact; the role of plantations in community health and culture; and the role of plantations in the provision of forest products. A brief exploration of these topics, with links to further information, is outlined below.

BACKGROUND

Gippsland's plantations at a glance

- 72,000 ha softwood plantations
- 18,000 ha hardwood plantations
- Privately owned forests, farm trees and environmental plantings

A BRIEF HISTORY

Gippsland's plantation forests have ebbed and flowed in size and type since colonisation, largely in response to changing government policy, natural events and the decisions and actions of those charged with their management. In the early days of the industry, plantations were established by clearing native forest or reclaiming land previously cleared for agriculture or mining. Over the years since, some plantations have become native forest reserves or farmland again.

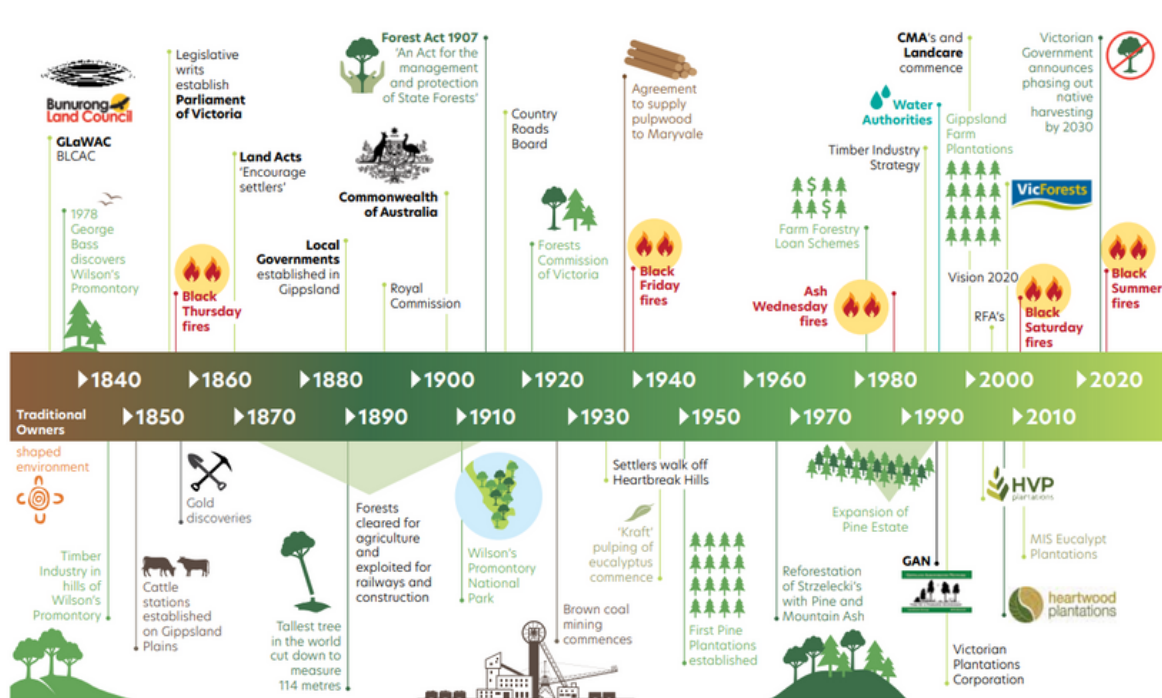


Figure 1: Key events and organisations that have influenced the current forest estate in Gippsland.
 Source: [GFHub-Investing-in-Gippsland-final-web.pdf \(gippslandforestryhub.com.au\)](https://www.gippslandforestryhub.com.au).

Plantations today

There are many different types of planted forest in Gippsland – and they come in all shapes and sizes. Different species, management objectives and regimes, product needs, land tenures, ownership and investment structures are just some of the variables that shape plantations, as do the unique topography, soils, climate, and ecological structures of each forest.

They are diverse places and balance diverse values.

As part of the transition away from native timber harvesting in Victoria by the end of 2023, the state has committed \$110 million to increase the plantation estate, and farm forestry initiatives have also been boosted. In 2022, the federal government also announced \$86 million in timber plantation grants to help secure Australia's future timber needs.

However, the Gippsland Forestry Hub has put forward conservative modelling showing that by 2050, demand for products from Gippsland will expand by 34% on 2021 levels, requiring an additional 820,000 m³ of logs and fibre every year, by no later than 2045. According to this modelling, this means that the Gippsland region needs a significantly larger plantation base to secure its processing future and that there will likely be a supply gap of around 1.2Mm³ by 2030 and 2.1Mm³ by 2050

Studies have identified large areas of suitable land for future plantations throughout the Gippsland region. Much is on public land managed for both softwood and hardwoods products. The balance is on private land plantations owned by corporations and farmers. Expanding secondary forests may provide benefits not only to Gippsland's industrial sector, but also generate positive outcomes for other forest values, enhancing the region's natural capital.

2024 Gippsland wood flows

The coloured segments in the diagram below show the qualitative flows of wood fibre in and out of Gippsland, other regions of Australia and other countries, to serve domestic, import and export markets in 2024. The comparative volume of wood fibre drawn from Gippsland forests is very roughly represented in segments at the core of this diagram. All other rings beyond the core do not reflect comparative volumes of wood flow.

This diagram only picks up on major industrial wood flows. Small enterprise in farm forestry, wood salvage and processing is also active across Gippsland but it's quite small in scale. Moreover, the below is an imperfect attempt to indicatively illustrate current flows of wood based forest products in and around Gippsland, aimed at stimulating discussion.



Source: Paul Haar and David Bennett

Emerging Trends

Programs such as Landcare have a long history of promoting planting trees on farms for a range of timber and non-timber benefits, with movements such as regenerative agriculture motivating a resurgence in the awareness of the multiple roles trees can play in the landscape. This is supported by policy directions adopted by state and federal governments offering opportunities and incentives for the establishment of trees on farms.

Further, the climate emergency is driving investment into low environmental impact carbon positive initiatives. As the value of carbon units rise, emerging markets for carbon credits are becoming competitive with other agricultural enterprises, with consideration of

scale, species selection and land productivity driving the financial feasibility of carbon plantings under current market rulings.

Biomass feedstocks are becoming increasingly sought after as energy efficient carbon capture technology seeks to substitute fossil fuel based energy reserves in an emerging bioeconomy. Biodiversity enhancement and 'impact investment' models are also driving exploration of new ways of matching funding with tree planting projects that enhance landscape values.

Many studies investigating the overall impact of planted trees on livestock enterprises have shown that up to 20 percent of a farm can be planted to trees before there is a reduction in income from the livestock operations.

It is within the context of these trends and directions that the 'Plantations in the Landscape' Dialogue exists.

Opportunities for dialogue

This Dialogue will look at how we could best achieve these multiple benefits and multiple values in our plantations through the discussion of a series of questions. These include:

- What do we want from and for our planted forests? And who are 'we'?
- How do we address historical and current barriers? How can we avoid repeating mistakes?
- What might we need to do differently and how might we achieve this?
- How and why will private landowners and forest estate managers be motivated to manage their resource in a way that achieves public interest in the context of their private (profit driven?) business enterprise?

In relation to each theme:

- Why are these aspects of plantation management [stewardship?] important?
- Where are we at?
- Where do we want to go?
- How will we get there? Are our current methods adequate? What do we need to do differently?
- How will we measure success?

DIALOGUE THEMES

What follows is a brief exploration of some of the issues mooted for discussion and debate at the Yarram Dialogue. If possible, please take the time to click through the links in the 'Further reading' sections and explore the suggested websites, articles, reports and information provided. We have provided a smorgasbord of questions after each theme. Our plan is not to tackle each one during the dialogue, but rather to provoke ongoing thought and discussion.

Theme 1: The role of plantations in landscape health and their environmental impact

The dialogue around this theme may consider the following opportunities and challenges:

- The inclusion and management of plantation forests in landscape scale biolinks aimed at conserving native wildlife, targeting pest species, limiting bushfire risk and maintaining healthy soil, water and air, and the opportunities and challenges for collaboration between different land managers in the region to achieve these environmental priorities.
- The relationship between plantations and plantation management and other forested, farming and neighbouring ecosystem types (eg native forests, coastal heathlands, morass country/lakes, marine areas etc) in a mosaic landscape, and how plantations may affect (positively or negatively) these areas, with reference to threatened species, water, soil and air quality.
- Plantations and their interaction with climate change and water availability in the wider landscape, including potential negative impacts on stream flow and aquifers, contrasted with potential benefits of planted forests for evapotranspiration, heat absorption, soil carbon, and groundwater recharge.
- The possibilities for climate change mitigation from the restoration/establishment/management of planted forests balanced against landscape level water supply issues and fire risk.
- Motivating private investment in environmental outcomes with reference to business values, regulatory mechanisms, social licence/customer and public expectations, and the potential for commercial productivity gains associated with improved environmental performance.
- Developing biodiversity values in agroforestry and agroecology on private land in the face of past and present economic, social and policy challenges.

FURTHER READING

- Alexandra and Campbell, Plantations and sustainability science: the environmental and political settings
- Bass Coast Council, Climate Change Action Plan
- Biolink Ecological Consultants, Brataualung Forest Park: landscape context, occupancy and habitat use by the Strzelecki koala population
- Lindenmeyer and Hobbs, Fauna conservation in Australian plantation forests – a review
- Victorian government, Victorian Climate Strategy
- Regional Development Australia, Gippsland Regional Plan 2020 - 2025
- Wolfram Buss, Kirsty Yeates, Eelco J Rohling, Justin Borevitz, Enhancing natural cycles in agro-ecosystems to boost plant carbon capture and soil storage

DISCUSSION QUESTIONS

- What examples are there of successful biodiversity enhancement in Gippsland plantations?
- What are the key environmental management and wildlife conservation priorities in Gippsland that could be influenced (positively or negatively) through plantation management practices?
- How does the presence of a plantation estate impact landscape health in Gippsland?
- How can we better manage biodiversity across all land tenures through a well-considered introduction of trees into the landscape at different scales?
- How can forest management be improved in Gippsland to address threats caused by climate change?
- What are the biggest opportunities from Gippsland's forests to help address climate change?
- How can Gippsland's forests be best managed for supplies of high quality and secure water resources, including environmental water?
- How can we better develop more integrated approaches to managing Gippsland's forests, rivers and lakes that recognise their intimate interconnections?
- How can we encourage public and private investment in better environmental and ecosystem service outcomes in plantation management?
- How can we achieve harmonious coexistence between commercial and environmental outcomes in plantation forest management?

Theme 2: The role of plantations in community health and culture

The dialogue around this theme may consider the following opportunities and challenges:

- Traditional Owner engagement (or lack thereof) in private plantation management and the potential for positive cultural impact and support of Indigenous livelihoods
- The potential for the plantation sector to support regional economic resilience for the broader community through absorbing workers displaced from native forestry and the coal mining and energy sectors, including farm scale diversification, links to other industries, employment and capacity building.
- The potential for the plantation sector to support community wellbeing through recreation, and tourism.
- The complexity of equitably sharing water resources and the impacts and tensions around plantation expansion on downstream water flows through public/community and private land.
- The complexity of navigating community concerns around the perceived and actual bushfire risks of being close to plantations and the impact of this on plantation expansion.
- Land use conflict and the complexity of navigating community concerns around expanding plantations and the potential reduction in food production areas and land availability.

FURTHER READING

- Destination Gippsland, [‘TOWARDS 2030’ GIPPSLAND DESTINATION MANAGEMENT PLAN](#)
- [Dja Dja Wurrung Forest Gardening Strategy 2022-34](#)
- Farming for the Future, [Farming for the Future – Evolving Farm Business](#)
- Forestry Australia, [Turning the Goals of the National Bushfire Management Policy Statement into Objectives and Key Performance Indicators](#)
- Glawac, [Publications and strategies](#)
- Jackson, et al, [Reshaping forest management in Australia to provide nature-based solutions to global challenges](#)
- Jassim et al, [Community perceptions of carbon farming: A case study of the semi-arid Mulga Lands in Queensland, Australia](#)
- Lindenmeyer et al, [Diversifying Forest Landscape Management—A Case Study of a Shift from Native Forest Logging to Plantations in Australian Wet Forests](#)
- Miller and Buys, [‘Not a local win’: Rural Australian perceptions of the sustainable impacts of forest plantations](#)
- Holmgren, D. [Bushfire Resilient Land and Climate Care](#)
- Touts and Black, [The Social and Economic Implications of Farm Plantation Forestry: A Review of Some Key Issues](#)
- Victorian Government, West Gippsland [Regional water strategy](#)

Turning the goals of the national bushfire management policy statement into objectives and key performance indicators

<chrome-extension://efaidnbnmnnibpcajpcglclefindmkaj/https://www.forestry.org.au/wp-content/uploads/2022/11/Final-KPI-Document-v2.pdf>

Farming for the future

<https://farmingforthefuture.org.au/>

DISCUSSION QUESTIONS

- How can Gippsland's plantation sector engage with First Nations people?
- How does the plantation estate in Gippsland impact cultural heritage in the landscape?
- How can Gippsland's plantation industry at all scales best support economic resilience in the region?
- How can Gippsland's plantation industry adjust its practice so it can address growing environmental and social concerns in the community? What are these key concerns?
- How can plantations support the health and wellbeing of locals and visitors through recreation and tourism?
- Can and should the local community own more agency in the management of private plantation estates?
- How can we best tell stories of the benefits of plantations to the region? Who can play a role in this storytelling?

Theme 3: The role of plantations in the provision of forest products

The dialogue around this theme may consider the following opportunities and challenges:

- The complex supply-demand dynamics for timber products, including the challenges around offsetting native forest supply, new product development and processing, investment, and the implication of new plantation management objectives on product manufacturing strategies.
- The potential economic, social and environmental benefits of valuing non-timber forest products – including agro-forestry co-benefits, recreation/ tourism etc - and the challenges of navigating these paths.
- The potential monetisation of environmental outcomes in planted forests (for example, carbon and biodiversity credits, impact investment, and the quantification of natural capital), and the navigation of this from community, regulatory and economic perspectives.
- The complexity of expanding plantations with respect to land availability, and landscape-level impacts.
- The connectivity between forest and non-forest based industries within and outside of Gippsland.
- Issues around climate change and how droughts, changing rainfall patterns, floods and more frequent and intense wildfire stemming from climate change may affect the types, regenerative capacity and growth rates of trees grown for timber.

FURTHER READING

- DEECA, [Forestry Transition Program \(deeca.vic.gov.au\)](http://deeca.vic.gov.au)
- Gippsland Forestry Hub, [Carbon Farming Guide 2022](#)
- Gippsland Forestry Hub, [The Support Plantation Establishment Program](#)
- Forestry Australia, [position statements](#)
- Monckton and Mendhan, [Maximising the benefits of trees on farms in Tasmania – a desktop review of investment opportunities to improve farm enterprise productivity, profitability and sustainability](#)
- PF Olsen, [Investing in Gippsland's Sustainable Forest Future](#)
- University of Melbourne, [Next Gen Forest Plantation Research papers](#)

DISCUSSION QUESTIONS

- How can Gippsland's forest and timber industries transition their operations towards alleviating the expected shortfall in locally produced construction wood when native forest harvesting ends? What might that look like?
- The support and enthusiasm for agroforestry has waxed and waned many times in Australia in the last 30-50 years. What are the barriers that have impeded continuity of a strong practice of agroforestry across Gippsland? What can we learn from First Nations people about the importance of intergenerational legacy through connectivity to forests, planted or otherwise?
- Based on learnings from past policies and incentives, how well will new strategies and incentives currently emerging from the Victorian Forestry (transition) Plan contribute to Gippsland's and Australia's needs for wood fibre and climate action?
- How can we develop new timber processing and marketing pathways in Gippsland that are better suited to the changing supply of wood? How can we reconcile supply and demand?
- What are the opportunities and impediments to investment in "natural capital" products?
- What changes might be needed to Gippsland plantation forest management in response to climate change, shifting product demand, evolving management objectives and quality standards, changing consumer expectations (social, environmental)?
- How can we enable and encourage farmers to plant more trees for a range of benefits? What are the barriers? What constrains or enables people to invest in trees?
- How can we close the gap between small scale on-farm timber production and expectations of scale/ volume of production in existing supply chains.
- What knowledge/ skill/ capacity building is required to manage our increasingly diverse array of plantation types for new objectives in an increasingly risky and uncertain business context (environmental, socio-political, economic)?
- Do we need new approaches to business development (more flexible, adaptive, diverse, collaborative) to achieve regional resilience?
- How can we attract public and private investment in plantation development and capacity building? What education pathways do we need? How can the government best support positive outcomes?
- What are the commonalities and differences between different growers and members of the plantation supply chain? How do these influence possibilities for collaboration and shared investment?



For more information about the
Gippsland Forest Dialogue visit:

www.gfd.org.au



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