Growing the future

The time for farm forestry is now

STEMS FOR CO_2

Meet the farmers turning trees into assets

New research shows promising farm forestry returns

Alternative species guides for Tasmanian growers

The timber industry's 'sleeping giant'

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Private **Forests** Tasmania

CEO MESSAGE

Dr Elizabeth Pietrzykowski

Having joined Private Forests Tasmania 18 months ago, I have now had time to reflect on my journey to this point. I think back to where my passion for forestry began. It was from spending most weekends fishing at the various highland lakes of Central Tasmania with my family. I was immersed in not just all the things I could see living and growing at the time, but also how our forests survive over the long term in these harsh and changing environments.

The increasing frequency of bushfires have highlighted how our landscape copes under current climate conditions and the risks of passive management. Although we are seeing signs of survival and rejuvenation, the intensity of the fires highlights the need for science-based forestry practices that balance conservation with timber production and a range of other uses. Well-managed multiple-use forests are more resilient to fire, pests and disease, benefiting both ecological and economic outcomes. Forestry professionals play a key role in this effort. Their expertise in sustainable active forest management helps mitigate fire risks and maintain forest health through appropriate silviculture practices, including fuel reduction burning and maintaining associated firebreaks and roading.

When wildfires do inevitably occur, forestry professionals contribute their skills and equipment to fight these fires. They also assist with managing outbreaks of pests and diseases and collect and make available valuable data and information to help monitor and manage our forest environments. Therefore, active forest management plays a role in reducing the susceptibility of our forests to bushfires, pests and disease, which in turn leads to better climate outcomes. These other benefits from having a well-resourced forest management sector, with income from timber production to help offset forest management costs and fire-fighting capability, are often overlooked in the public debate about the future of our forests and forestry.

Over the coming months Private Forests Tasmania will be finalising its next Strategic Plan. A key focus in preparing the plan has been collating and incorporating stakeholder feedback from our strategic planning session held in Launceston in October 2024 and comments received on a draft of the plan in February 2025. Our Strategic Plan sets out our strategic direction, including our purpose, our goals and priorities for the next three years.

We hope you enjoy reading through this booklet and encourage you to follow links to further information and tools. As always feel free to contact Private Forests Tasmania and I thank the many people who have done so. Receiving feedback and hearing about what pressures you encounter drive us to ensure our work is relevant and applicable to improving the Tasmanian forestry industry.

Warm regards,
Dr Elizabeth Pietrzykowski

Trees: a smart investment

FOR SUSTAINABLE TASMANIAN FARMING

STEMS FOR CO_2

Three Tasmanian farmers are taking part in a new project to establish commercial tree plantings on farms and demonstrate the carbon sequestration potential for their specific location and planting.

The Private Forests Tasmania Stems for CO_2 project, supported by the State Government's Renewables, Climate and Future Industries Tasmania, has awarded $442,050 of grant funding for farmers to integrate trees into their agricultural operations.

The project will see 273 hectares of commercial trees planted across three properties to sequester carbon, while generating on-farm commercial and environmental benefits.

Much of the planning and on-farm work is being supported by forestry contractors and carbon management companies to maximise the benefits for the participating farmers. Private Forests Tasmania will be working alongside the farmers to communicate progress and share insights about the projects.

The initiative will demonstrate the commercial and environmental benefits of the plantings, to encourage more landowners to integrate trees into their business enterprise.

Meet the participating farmers

Alison Napier

Area planted:	**104 hectares**
Species planted:	**Radiata pine**
Configurations:	**Plantation and shelterbelt**
Location:	**St Marys**
Operation:	**Beef**

Alison manages land across four farms in Tasmania's Fingal Valley. She is establishing 104 hectares as part of the Stems for CO_2 project. This comprises of radiata pine plantation and strategically placed shelterbelts.

Alison will calculate the amount of CO_2 being sequestered from the plantations which will contribute to estimating her operation's carbon footprint. The trees will help balance total farm emissions.

'It's important for our beef enterprise to grow trees to offset our farm's emissions', says Alison.

'Carbon-neutral farming is increasingly important to consumers, and food wholesalers are willing to pay a premium for it.'

Alison is also looking forward to the co-benefits of the plantations for her operations.

'We are looking to protect some of our cattle yards as they are very exposed', says Alison, 'to have shelterbelts will be appreciated by my staff and cattle.

'Being able to incorporate them into a forestry project is really valuable – it diversifies the business, makes the best use of the land and provides many benefits.'

Alison's project will sequester

44,159 tonnes

of CO_2e* across 27 years in the first rotation.

That's enough to offset annual emissions from

9,600 cars or 2,523 homes.†

Learn more about Alison's project

Dougal Morrison

Area planted:	**156 hectares**
Species planted:	**Radiata pine**
Configurations:	**Shelterbelts and plantations**
Location:	**Oatlands**
Operation:	**Meat and wool**

An Cala is an 8,000-hectare family-run farm in Oatlands. Fifth-generation farm manager Dougal Morrison is using his new plantings to diversify farm income.

Under the project, Dougal will plant more than 160,000 seedlings. This will comprise of 152ha as part of a second rotation once an *E. nitens* plantation is harvested, as well as a new 4ha sherterbelt.

Dougal sees forestry as a vital part of his mission to improve the farm's landscape and operations.

'Our plans are about getting the best return on that land, and commercial timber and carbon plantations offer us a worthwhile reward for effort,' says Dougal.

'We weighed up whether to convert the land back to agricultural grazing or put it back into trees. But with the carbon project, the numbers came out in front.

'Forestry helps us diversity our risk through another income stream.

'It also gives us the option to offset the carbon footprint of some of our other commodities by meeting certain environmental wool and meat market certification benchmarks.'

Dougal's project will sequester

94,280 tonnes

of CO_2e across 27 years in the first rotation.

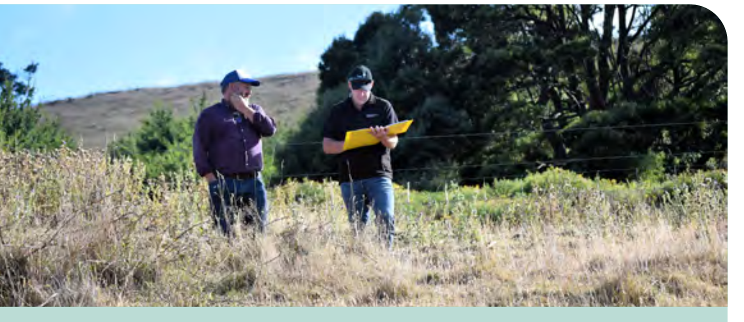
That's enough to offset annual emissions from

20,648 cars or 5,427 homes.†

Learn more about Dougal's project

Julian Devery

Area planted:	**13 hectares**
Species planted:	**Sweet chestnut**
Configuration:	**Woodlots**
Location:	**Riana**
Operation:	**Meat**



Julian is a hobby farmer with a 21-hectare property in Tasmania's northwest. The Stems for CO_2 project will add sweet chestnut plantations to existing oak plantations, which are under grazed by sheep.

As well as carbon abatement, the project will bring agricultural benefits, specialty timber harvest and tourism benefits for Julian's farm.

'Unlike pretty much any other tree, once you harvest the timber of chestnut trees, they can be coppiced at ground level,' says Julian.

'The tree regrows itself, restarting the whole timber production and carbon capture cycle – without having to deal with tree stumps or replanting.'

Julian is also looking forward to the operational and commercial opportunities the plantations can bring. Chestnut wood is used in many parts of the world for fencing, construction material, barrels and furniture.

'The oak plantation already provides superior sheep grazing conditions compared to open paddocks, and this should also apply to the new plantings.

'And chestnut plantations are picturesque so we're planning to put in some tourist farm-stay accommodation. People could even get married here.'

Julian's project will sequester

9,167 tonnes

of CO_2e across 25 years on the first rotation.

That's enough to offset annual emissions from

1,993 cars or 524 homes.†

Learn more about Julian's project

How much carbon?

A full carbon accounting model can estimate the total tonnes of CO_2e stored and released throughout the life of each of the project's forest sites.

Factors such as the location, climate and future management plan for each site were used to predict how each forest would grow and how much carbon and nitrogen would be captured or released.

Here's what we found:

As trees grow, they absorb carbon and store it in its branches, stems, leaves and roots. This happens at different rates during a tree's life cycle. Younger trees sequester more carbon as they reach maturity, before slowing down later in their life cycle.

When a tree is harvested, a proportion of the carbon remains in the timber and is locked away in forest products – from timber cabinetry to floorboards. Carbon is released only when these products decay or are burnt.

Carbon can also be released by forest debris such as dead leaves or wood falling on the ground decaying over time.

When a forest is thinned, the total amount of carbon stored in the forest decreases temporarily. But over time, this reverses as the remaining trees grow bigger. The same happens at the final harvest of the forest, but over time this too reverses as a new forest is planted and grows.

The longer a forest continues to be harvested and replanted over multiple rotations, the more carbon dioxide is removed from the atmosphere and stored in timber products, reducing the effects of climate change.

Learn more about the carbon benefits of trees at treealliance.com.au/carbon-benefits

In total, the Stems for CO_2 project will sequester 148,306 tonnes of CO_2e across the first rotation.

STEMS FOR CO_2

That's enough to offset annual emissions from 32,240 cars or 8,475 homes.†

For more information on Stems for CO_2, visit pft.tas.gov.au/stems-for-co2-program-2024

*CO_2e is carbon dioxide equivalent, a measure used to compare the emissions from greenhouse gases across various sources. Figures calculated by **Private Forests Tasmania** via Esk Mapping.

†Calculated based on average annual passenger vehicle emissions of 4.6 metric tonnes of CO_2e and average annual household emissions of 17.5 metric tonnes of CO_2e.

Log supply project

The timber industry's 'sleeping giant'

Tasmania's private forests full of untapped potential for landowners and the economy

Australia is reducing its focus on native forest harvesting from public forests, as seen by Victoria and Western Australia ending commercial native timber harvesting in state forests in 2024. Although Tasmania does not have similar plans, expanding the role of private forests is crucial to futureproof the state's timber supply.

Tasmania is home to 785,000 hectares of private native forest and 282,000 hectares of privately owned timber plantation, with plantations consisting of around 72% hardwood and 28% softwood. Forest owners are a diverse group, ranging from large-scale producers to small independent growers.

Each has the potential to play a vital role in Tasmania's timber market. Australia's home building and renewables markets are driving up demand for timber, but gaps in onshore timber supply are opening.

Tasmania's private forestry sector has significant untapped capacity, creating opportunities for private forest owners to engage in the market and contribute to the industry's long-term sustainability. Private Forests Tasmania is taking action to explore these opportunities. With input from stakeholders, Private Forests Tasmania will explore solutions to stimulate the private forestry industry and create pathways for private forest owners to play a much greater role in the local market.

This will simultaneously increase onshore log supply for Tasmanian processors, support the local economy and regional communities, and provide long-term benefits for landowners as they increase and diversify their income streams.

'We now have an opportunity to awaken the sleeping giant,' says Dr Elizabeth Pietrzykowski, Private Forests Tasmania CEO.

'As Tasmania moves towards a more diversified timber industry, the role of private forest owners will be more critical than ever. Private Forests Tasmania is actively engaging with numerous stakeholders to explore how we can better support private forest owners in accessing the market.

'With the right infrastructure and support, Tasmania's private forest sector can meet growing demand and ensure the industry's long-term viability.'

Private Forests Tasmania invites interested landowners to reach out to discuss how they can be part of the next chapter of Tasmania's timber industry pft.tas.gov.au/contact-us.

Tasmania's private native forest has:

51,000,000 tonnes of standing harvestable timber across **328,000 hectares** of harvestable forest*

It currently produces **200,000 tonnes** of timber per year.

This is down from **2,500,000 tonnes** at the peak of private native production in early 2000's.

*with regulatory exclusions considered. Total private native forest in Tasmania is 785,000 hectares.

Total Native forest harvest volumes 1994-95 to 2023-24 (including fuel wood).
Data reference source - 2020 Tasmanian Private Forests Resource Review.

New research demonstrates benefits of trees on farms

And what it means for farmers

A new research report, Co-benefits of Trees on Farms, is shedding light on the environmental and economic benefits of planting trees on farms in southeast Australia.

The study, published by Dr Rachelle Meyer from the University of Melbourne, explores how tree planting can support farmers to reduce their operation's carbon balance, improve productivity and support sustainability in the face of a changing climate.

It found that planting trees on farms can significantly reduce net carbon emissions over time. On the high-productivity farms studied as part of the research project, planting trees offset total emissions from between 20% and 33% over the 30-year analysis period. These reductions are much greater than any that could be achieved by other currently available mitigation options.

This is an important finding for farmers who are facing increasing pressure to reduce their operations emissions to meet market and government sustainability targets, including the Australian Red Meat Industry's CN30 goal of being carbon neutral by 2030.

Interviews with farmers as part of the study showed that potential return on investment is an important part of the decision to grow trees.

For two of the three case study farms, the research found a 10 percent annual rate of return was possible. For the third, the rate of return was between three and seven percent. Figures were impacted by factors like how much shelter the trees provided, the quality of pasture replaced by trees and carbon project costs.

A scenario with timber production provided returns that were less variable across differing productivity benefits or carbon project costs.

Dr Rachelle Meyer encourages landowners to consider tree planting as part of an integrated whole-farm plan to maximise these benefits.

'Given that planting trees is a long-term commitment, it's important that trees are incorporated in a way that assists in achieving goals on farm,' says Dr Meyer.

'This allows for net emissions reductions that are straight-forward since they align with existing farm objectives.

'Timber revenue can also boost returns. It can change a planting from a cost or a low return to one that is providing a good return.'

For farmers considering tree planting, relevant and reliable information about the benefits and risks is vital to support decision making. Planting trees based on individual objectives means that farmers can get the most out of their plantations, and realise the many benefits of trees on farms.

To discuss your goals, contact Private Forests Tasmania on 1300 661 009 or email admin@pft.tas.gov.au.

The co-benefits of trees

Livestock productivity
Pasture and crop growth
New revenue streams
Environmental benefits

Explore these benefits with the Tree Alliance Knowledge Hub: treealliance.com.au/on-farm-benefits

Learn more about the research as part of the Trees on Farm project

Trees planted on **5–12%** **of a high-productivity farm**

can offset total emissions by **20–33%** **over a 30-year period.**

10% **annual return on investment is possible with trees.**

Alternative species guides for Tasmanian growers

Private Forests Tasmania has released a list of alternative tree species that are suitable to grow across the state – with many holding the potential for high-value timber production.

Tasmania's recognised plantation species are well established across the state: Eucalyptus nitens (Shining gum), E. globulus (Blue gum), Pinus radiata (Radiata pine), Acacia melanoxylon (Blackwood) and, to a lesser extent, Cupressus macrocarpa (Monterey cypress). Information about these species and their applications can be found at pft.tas.gov.au/species-guides.

But there is also a range of species that offer Tasmanian growers the opportunity to enter alternative timber markets not dominated by large, industrial-scale growers. Many have already been planted on test sites across the state.

Alternative species can fill niche roles in the market, such as producing naturally durable timber in place of chemically treated wood, or to create high value / small volume products such as cabinetry. They can even supplement native specialty timbers that are becoming more difficult to acquire, improving market diversity and reducing the need for imports.

On-site, growers can match alternative species to different silvicultural systems to increase a plantation's sustainability and biodiversity, or to expand their potential forest estate into areas not suited to the current species. This can increase value and returns while diversifying and reducing risk.

Growers aren't expected to plant alternative species on a large scale, but they can experiment on smaller suitable sites. The performance of alternative species is currently relatively unknown, but is of growing interest to many landholders looking to access the timber market or diversify their offering.

'We are noting a growing interest in specialty timbers,' says Jarrod Burn, Operations Manager at Private Forests Tasmania.

'The economics are more appealing to those seeking to establish and manage smaller woodlots.'

'There are many options for private landowners to plant for both biodiversity and potential timber harvest. Selection depends on site requirements and characteristics like climate, soil and ecological factors.'

It is essential to understand the kind of alternative species that is most suited to a site. The new tree species list from Private Forests Tasmania includes information on the best position, rainfall, soil type and conditions for each species. It also includes end uses so growers can understand the potential markets for alternative species.

Find the full tree species list at pft.tas.gov.au/species-guides

or scan the QR code.

Any landowner considering alternative species should seek further advice from a forester. Contact Private Forests Tasmania for further information.

Some alternative wood value species include:

- Acacia dealbata (Silver wattle)
- Allocasuarina verticillata (Drooping sheoak)
- Allocasuarina littoralis (Black sheoak)
- Banksia marginata (Silver banksia)

Growers should approach nurseries around 18 months ahead of planting, to make sure there is time to plan, order seed and grow seedlings.

Forests of the future

Creating better outcomes for private native forests

Tasmania's extensive private native forests have a long history of active management for timber production. With a changing climate and expanding bioeconomy, private native forest management can boost the health and resilience of Tasmania's ecosystems while offering landowners an income stream.

Regrowth forests, if left unmanaged, can become overcrowded, leading to weaker trees, increased fire risk and reduced biodiversity. Careful and timely thinning allows forests to thrive by reducing competition for resources and helping forests adapt to environmental stresses. Reducing stand density means trees grow stronger and healthier – and healthier forests sequester carbon more effectively, are more resilient to pests, disease and extreme weather events, and offer valuable wildlife habitats.

Beyond the environmental benefits, well-managed forests can provide landowners with a renewable source of income. Partial harvesting silviculture types, including thinning, produces high-value timber products that can be sold to the local market and help to increase and diversify farm income.

CASE STUDY

Levendale native forest thinning

Size:	**120 hectares**
Location:	**South-east Tasmania**
Forest types:	*Eucalyptus delegatensis, Eucalyptus oliqua and Eucalyptus pulchella*

The Levendale site is a native regrowth forest owned by John Dart, a large-scale Tasmanian beef producer with extensive experience in private forestry. His goal is to improve the quality and growth rate of the forest, with the long-term aim of producing high-value wood products.

John's forest at Levendale was clearfelled in the 1970s and left to regrow naturally. The result was an overcrowded and low-productivity forest. To address this, a thinning operation selectively thinned 92 hectares of overcrowded forest to remove smaller and poorly formed trees in 2023. By reducing forest density by around 50 percent, the operation goal was to optimise forest health and growth potential.

Anticipated outcomes:

- **Timber production:** Up to 70 tonnes per hectare of logs were yielded from the thinning, with at least 95% being pulp log quality.
- **Carbon sequestration:** The thinning process promoted healthier growth and productivity of the retained trees, which will lead to increased carbon capture and resilience to environmental stress, pests and disease.
- **Water benefits:** Water runoff, groundwater recharge and streamflow is expected to be elevated for the next decade, benefitting aquatic biota and increasing water yields.

Sustainable forestry initiatives like the Levendale project demonstrate how active management can transform regrowth forests into thriving ecosystems that support both environmental and economic goals.

By adopting these practices, landowners can create healthier forests for future generations while supporting a valuable, renewable resource for Tasmania's economy.

Explore Private Forests Tasmania's native regrowth forest management resources:
pft.tas.gov.au/managing-your-native-forests

Unproductive land?

Make your whole property work for you

An underutilised or degraded area of your farm is an opportunity to grow trees. Establishing a plantation can:

Activate underused land
Transform land for tangible results: grow trees to harvest timber, improve your farms carbon balance, increase productivity and improve sustainability.

Improve farm efficiency
Support your whole farm system: trees provide shelter for animals and crops, improve soil health, protect water quality and increase biodiversity and habitat.

Manage problem areas
Protect your property's long-term health: strategic tree planting can rehabilitate erosion-prone land, areas with high salinity, and nutrient deficient soil.

Get the most from your plantation:
treealliance.com.au/plantation-planning

'We converted an area that was not productive into a radiata pine shelterbelt. Some of those trees will be harvested eventually, as well as supporting the productivity of the farm.'
Sarah Clark, The Back Run owner, Southern Tasmania

Learn more about tree planting at The Back Run:

Private Timber Reserves

Forestry that is simple, safeguarded and affordable

Private Timber Reserves are areas of land set aside for forestry. By declaring your land a Private Timber Reserve, you can:

- Secure the right to use land for forestry
- Simplify planning processes
- Maintain flexibility for your land
- Reduce tax and increase profitability

Learn more:
pft.tas.gov.au/private-timber-reserves-ptr

Planting passion for trees

Forestry education and engagement for Tassie high school students

Kyler Evans
Aspiring Farmer

Tasmanian students are gaining valuable hands-on forestry and agriculture experience to grow awareness and passion for trees across the state.

The Forest Education Foundation, a Private Forests Tasmania Tree Alliance member, gives high school students the opportunity to learn about Tasmania's forest environment and forestry industry. Through educational experiences, industry engagement and site projects, students gain practical knowledge of trees.

For 17-year-old aspiring farmer Kyler Evans, the more he studies agriculture, the more he understands the value that trees can have.

The Exeter High School year-12 student admitted he had little idea of the significant impacts trees can make on the health and productivity of agricultural landscapes until participating in several Forest Education Foundation initiatives over the past couple of years.

'Originally, I thought forestry was just putting a tree in the ground, growing it, cutting it down, then you've got a book,' Kyler said.

'Trees are very helpful when it comes to land management and the land itself.

'They provide windbreaks for livestock and cropping, which help with survivability and productivity, and they are great for biodiversity and soil health.

'The right tree in the right place can make a huge difference to the landscape.'

Kyler and his fellow students have taken part in several experiences over the past two years through the Forest Education Foundation, including planting a 111-hectare mixed-species shelterbelt at Exeter Farm School in 2024, attending a camp at Forico and visiting Hagley School Farm for an introduction to plantation management and tree pruning, hosted by Private Forests Tasmania.

Students have gained knowledge and experience in the role of tree farms in the landscape, from seed propagation and plantation establishment to ongoing management, biodiversity conservation, social and cultural values, and fibre product processing.

Kyler said he was introduced to farming by family members who work in agriculture, and he sees himself joining them once he has finished studying.

A career in some sort of agriculture is probably where I will end up, and a forestry job is not out of the question either, having had a taste of it,' he said.

Tree Alliance
Knowledge Hub

Have you visited the Tree Alliance Knowledge Hub? Discover how trees can work for you

- Explore the interactive farm map
- Access tools and resources
- Learn what's possible on your farm

The ultimate tree planting resource for Tasmanian farmers treealliance.com.au

Grow your farm's future

Get personalised planning support today

Arrange an appointment

Organise for a forester consultant to visit your property.

admin@pft.tas.gov.au

Call the free helpline

Let's talk about your goals and find out what's possible.

1300 661 009

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pft.com.au/subscribe

Private **Forests** Tasmania