



# Forest & Bird

TE REO O TE TAIAO | *Giving Nature a Voice*

## Four Forests for Climate

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### Contact

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# Four Forests for Climate

## Summary

There has been conflict and confusion over encouraging native regeneration versus exotic plantings in framing the eligibility of carbon sinks within the Emission Trading Scheme.

To resolve the conflict Forest & Bird proposes four categories of native habitat and forest carbon sink for the Emissions Trading Scheme to enable maximum sequestration of carbon with benefits to diverse landholders and native biodiversity.

## Recommendation

Forest & Bird requests that four types of carbon sink categories within the ETS are adopted to alleviate conflict and allow for the best outcomes for Government decision makers, land managers/owners/kaitiaki, native biodiversity, and the climate.

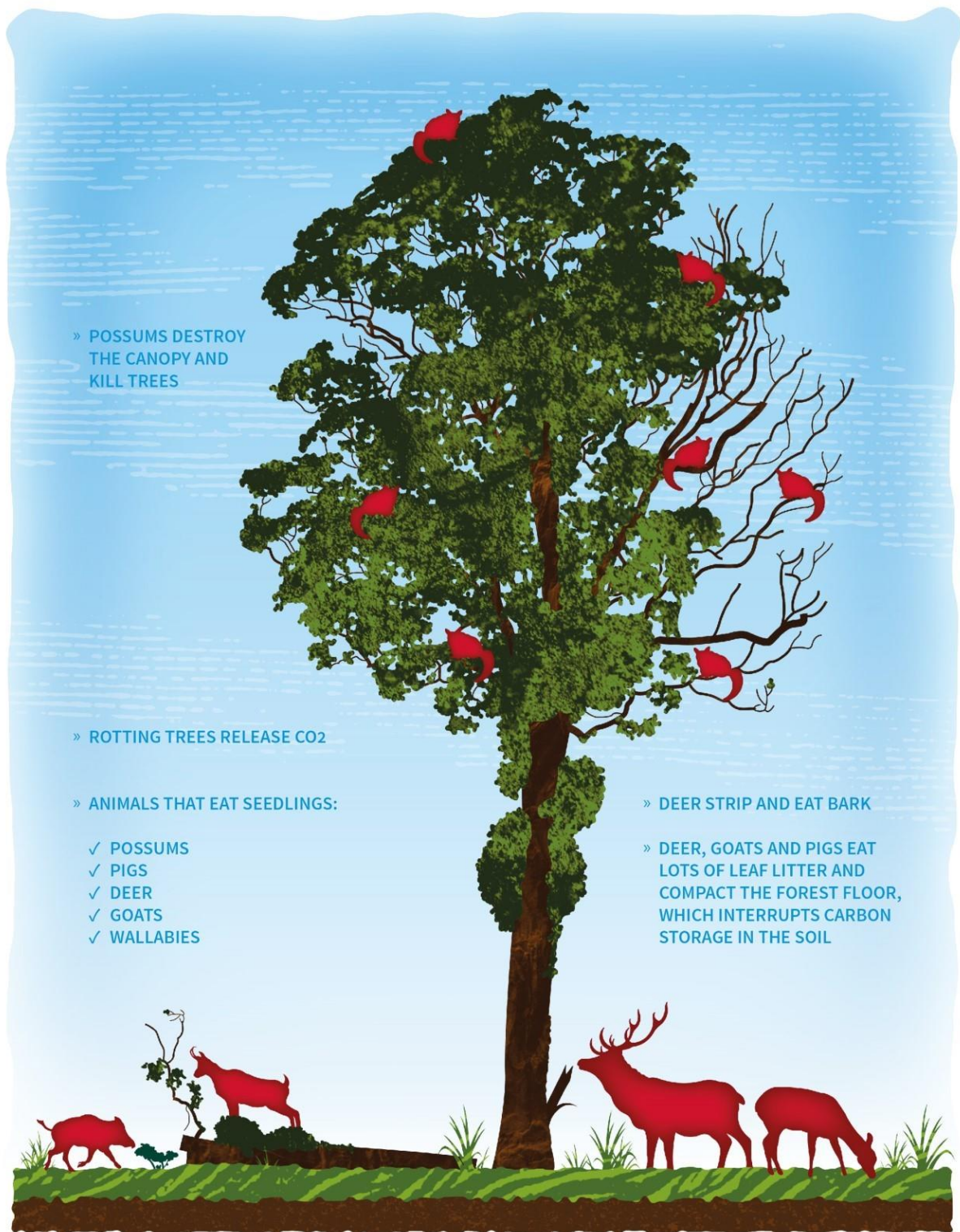
These categories are: 1) Permanent native habitat carbon sinks, 2) Forests in transition, 3) Planted continuous cover production forests, and 4) Exotic planted timber production forestry.

## Background

### **Two crises, one solution**

Healthy native forests and other native habitats – wetlands, shrubland, peatlands, and tussock lands – are the most sophisticated carbon sinks on land. Throughout the country, native ecosystems (native forests, shrubland, and tussock land) hold around 1450 million tonnes of carbon, 74% of which is stored in native forests.

These habitats are being degraded by introduced feral browsing animals (possums, deer, goats, tahr, chamois, wallabies and feral pigs) that wreck habitats and kill trees, resulting in millions of tonnes of carbon bleeding out into the atmosphere each year. Many natural carbon sinks have become emitters of carbon because of introduced animals.



Some natural carbon stores are still disappearing through land clearance. Manaaki Whenua research shows that a total of 22,865 hectares of different native habitats were destroyed in just the six years between 2012 and 2018. Of this, 2304 hectares were classed as 'native forest'.

Aotearoa faces the twin crises of ecological collapse, including the extinctions that go with it, and the global climate crisis.

Nature can help us cope with climate change, but only if we protect nature first. Incentives for land managers/owners/kaitiaki to protect native habitats mean nature can both mitigate climate change by locking in the greatest amount of carbon and at the same time protect native species and ecosystems.

### **Forests are critical for New Zealand's climate change response**

Well-managed permanent native forests are a highly effective way of storing carbon in the long term both in tree biomass and also within the soil. Exotic pine forests are good at rapid sequestration in the short term, however larger and longer-term storage is what matters most.

Nearly 15% of New Zealand's 2018 net greenhouse gas emissions per year — 8.4 million tonnes of CO<sub>2</sub> — could be stored in native habitats if feral browsing animals are controlled to the lowest possible levels.

The Zero Carbon Act establishes a framework for New Zealand to cut greenhouse gas emissions and adapt to unavoidable climate change. Under the Zero Carbon Act, He Pou a Rangi: the New Zealand Climate Change Commission proposed a shift from relying on exotic plantation forest for long-term carbon storage and sequestration, to protecting and restoring permanent native forests.

### **Forest & Bird has a long history of forest conservation**

Forest & Bird has been involved on native forest and forestry issues for many decades. Generations of members have campaigned to protect native forests from logging and degradation. Forest & Bird has also campaigned for and won improvements in exotic forest management.

Forest & Bird is a signatory to the West Coast Accord with the Government and the New Zealand Forest Accord with the plantation forest industry. Some of Forest & Bird's earliest campaigns were to protect forests for soil and water conservation.

Forest & Bird is also an active manager of 1482 hectares of native habitats from the Far North to Southland including the 550 ha Lenz Reserve in South Otago.

### **Climate change response and forest conservation is vital for nature**

A key priority for Forest & Bird within its strategic plan is for New Zealand to adopt a nature-centred climate change response. This means that on top of national action to lower emissions significantly, we take the urgent steps to bring native habitats and planted trees to good health to lower atmospheric carbon as soon as possible. This requires a significant shift in how we manage native and exotic forests nationally.

## **Key principles for forest policy**

The principles that underpin Forest & Bird's proposed approach to the role of forests in climate change are:

- **Nature-first solutions to the climate crisis.** With a biodiversity crisis and a climate crisis operating in tandem, policy that addresses both these crises simultaneously will deliver the greatest benefits.
- **Protecting and restoring native biodiversity.** We need to both protect what is left and also restore nature too so that ecosystem functions (including carbon storage) are operating at the level needed.

- **Just Transitions.** Changes to forestry rules will alter rights and responsibilities as well as economic and social opportunities. Changes should be carried out in a way that acknowledges the impact of historic injustices and which supports communities to adapt.
- **Maximum carbon sequestration.** Once New Zealand has reached zero gross fossil fuel emissions and substantially reduced biological farming emissions, there will remain a significant need to remove historic emissions from the atmosphere and keep warming to no more than 1.5 degrees.

## Resolving the tensions over forested land use

Government consultations over what kinds of forests will remain in the Emissions Trading Scheme to be eligible for NZU carbon credits has caused concern and anxiety from a wide variety of landowners including iwi, forestry corporations, carbon farmers, the farming industry, and conservation and environment interests. The issue has been framed around whether native or exotic trees are appropriate for permanent carbon sinks. The options under consideration have serious economic, social, and environmental dilemmas.

Unfortunately, this has become framed in the media as ‘native trees versus pine trees’. Forest & Bird considers that there is a different and successful way to address concerns that creates more win-win outcomes for land managers/owners/kaitiaki that will have maximum benefit for the climate and native biodiversity.

The conflicts can be resolved – with overall greater outcomes – by having four different categories of carbon sink which includes a diversity of habitats and forest management approaches. This will create the best outcomes for land managers/owners/kaitiaki, native biodiversity, and the climate.

### 1. Permanent native habitat carbon sinks

This category includes old growth (including historically partially logged or mined), naturally regenerating, assisted regeneration, planted permanent native forests, shrublands, mangroves, wetlands, peatlands, and tussock lands. This is a broader classification than permanent native forest because not all land-based vegetation carbon sinks are forests.

Holistic biodiversity management is important because the more complex an ecosystem is, the more co-benefits it provides, the more stable it is, and the more resilient it is to any disturbance or damage. Keeping native habitats in the best of health is key to maximising both carbon storage at reasonable cost and their natural resilience in a changed climate.

Policy in relation to this native habitat classification should be aimed at maintaining and increasing their natural diversity and long-term ability to store carbon, for example:

- Incentives need to be aimed at supporting landowners to take actions that will protect habitats and store the most carbon.
- Forest & Bird would be open to a native biodiversity bonus for these forests although any such proposal should address issues arising from WAI262.
- All carbon sinks within this category would need to be registered as current Significant Natural Areas (SNAs) within district or regional plans (under the Resource Management Act) to create alignment between the ETS and RMA. This action would help to achieve Te Mana o te Taiao strategic priority of *Getting the system right*.

## 2. Forests in transition

These are nursery areas in transition to future native forests and currently in one or more of the following land uses:

- already planted in exotics
- in regenerating manuka and/or kanuka and/or planted native species
- older pine plantations
- gorse

This classification would intentionally create a pathway for existing exotic carbon forests to transition to permanent native forests and thereby retain eligibility for ETS credits.

Post-2023 planting transitional forests should be discouraged where natural regeneration is rapidly occurring. Invasive plant species, such as Douglas fir, sycamore, lilly pilly, and tree privet, which can germinate and grow in low light to become canopy dominant species, should be excluded. Plantations should be managed to ensure diverse native seed sources are available, with plant and introduced animal pests controlled to the lowest possible levels.

Policy in relation to these forests should be aimed at expediting the transition to permanent native forests and should include:

- No log extraction in this classification
- Aim to include these areas as Significant Natural Areas when district or regional plans are revised each decade to acknowledge when the carbon sink has appropriately transitioned to majority native cover
- A requirement for eco-sourcing seed or other plant material for establishing native vegetation above what birds and wind bring in
- A bond to the Crown to give assurance that the work needed for the transition from exotics will actually occur over the 20-100 year time frames involved
- Compliance with wilding conifer control requirements and land management requirements under the Biosecurity Act, Wild Animal Control Act, Conservation Act, and the Crown Pastoral Land Act/Land Act
- Eligibility for the ETS subject to an exotic-to-native forest transition plan, and includes the matters listed above and the registration of a bond
- Consideration of a simplified track for small landowners

**Note:** We acknowledge the scope of *Forests in Transition* will not be suitable within some regions such as Canterbury (and much of the eastern South Island) and Hawkes Bay where very little original forest and natural seed source remain to (re)generate the transition to native forest needed. The *Forests in Transition* category is potentially workable where there is evidence regeneration can occur from natural and diverse stands of native forests nearby and could be supplemented by additional planting to bring back the diversity of species that would have originally been there.

Some exotic species planted as carbon sinks in dry regions could additionally fuel the issue of weeds that we must avoid. The national wilding conifer control program demonstrates the considerable risk to native ecosystems and cost associated with planting the wrong exotic tree in the wrong place.

The *Forests in Transition* category would serve for existing exotic plantings, not for newly planted pines or other exotics after 31 December 2022.

### 3. Planted continuous cover production forests

This classification is managed, planted forests including eco-sourced native trees whose primary function is to provide high value fibre, honey, and energy. This continuous cover forestry would allow for selective timber extraction over time, but any extracted tree would need to be planted, not naturally regenerating. It would be in line with the principle that 'if you plant it, you can cut that tree down'.

A significant risk in considering future production native forests is that illegally logged timber could undercut legal supplies because illegal loggers would not face the same land management and capital costs. Policy in relation to these forests should be aimed at minimising the environmental impacts of forest management and ensuring traceability to prevent illegally sourced timber entering the market and include:

- Requirement for local seed eco-sourcing
- Resource Management, Crown Pastoral Lands, and Forests Act controls
- A traceability regime to prevent illegally-logged timber from entering the market
- Access to carbon markets at a level that does not inhibit the necessary climate change transformation of industrial and agricultural sectors

### 4. Planted exotic forests for harvest

These are forests of exotic trees planted for harvest. Their primary role is as a fuel and fibre feedstock in a circular economy rather than carbon storage. Their primary climate change benefit is therefore in enabling New Zealand to transition off fossil fuels and emissions intensive materials and providing an alternative to more emissions-intensive land use. The policy should be primarily aimed at the environmental management of these forests and include:

- Resource management controls on planting, forest management, and harvest
- Weed and pest management, including wildling conifer prevention
- Access to carbon markets at a level that does not inhibit the necessary climate change transformation of industrial and agricultural sectors
- Retain the existing framework for exotic production plantations and how they are recognised within the ETS

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**Note:** A permanent native habitat carbon sink must be fenced or have effective natural pest exclusion boundaries, with pest control keeping all browsing animals as low as possible. Grazing of farmed deer, cattle, sheep, and other livestock prevents diverse regeneration and a healthy carbon sink just as grazing by feral deer, goats, possums, and pigs do.

Carbon sinks can't be regenerating native habitats with claims for ETS carbon credits and at the same time being grazed for agricultural income. Grazing undermines the regeneration and therefore the permanence of the carbon sink. However, there would need to be some limited exceptions such as invasive weed management via grazing for specific contexts.