



BIODIVERSITY RISKS AND OPPORTUNITIES IN FORESTRY INVESTMENT

As a responsible investor focused on forestry, land use, and conservation, New Forests understands that biodiversity is critical to safeguarding healthy and resilient ecosystems that are fundamental for the success of the investments we manage.

Biodiversity is a globally significant risk and opportunity because communities and economies around the world rely on it to provide goods and services. However, biodiversity is not yet well understood by the financial community. To support investor understanding, New Forests is sharing our perspective on managing biodiversity-positive investment activities.

What is biodiversity?

Biodiversity is nature – it includes the wide variety of living organisms on Earth, ranging from vertebrates to soil microorganisms to plants.¹

Why does biodiversity matter?

Biodiversity provides important services to people, including economic, ecological, recreation, cultural, and scientific.² Therefore, it has a significant impact³ on global functioning, including socio-economic stability; global health, peace, and trade; economic development; and gender equality.⁴

What's happening to global biodiversity?

Since 1900 the world has lost nearly three plant species annually⁵ and since 1970, it is estimated that there has been a 68% decrease in wild vertebrate populations.⁶ Currently, 25% of plant and animal species are at risk of extinction.⁷ While land use change – from agriculture, urbanisation, and other sources – is the greatest driver of biodiversity loss, species overexploitation, invasive species and disease, pollution, and climate change also contribute.⁶

How do we halt biodiversity loss?

Investors can address biodiversity loss by requiring companies to embed conservation and habitat protection in their operations and supply chains; mandating disclosure from companies and investments; supporting robust policies, advocacy, and education; and other actions. Financial institutions can also price biodiversity into their balance sheets to encourage its protection and acknowledge its significance.⁸

New Forests is dedicated to addressing biodiversity conservation across the assets we manage. Forests account for 80% of terrestrial biodiversity, with the most biodiverse forests being rainforests.⁹ However, deforestation is a significant threat to biodiversity; it is estimated that 7.6 million hectares are lost annually.⁸ Forest biodiversity loss has widespread impacts, including socio-economic, as forests provide livelihoods and subsistence resources for people around the world.¹⁰ Additionally, forestry is highly dependent on nature to function properly;⁵ without natural ecosystem functions, the processes that support forest productivity and resilience to environmental threats are at risk, which can erode asset value and increase risk to extreme events.

New Forests seeks to understand and promote the value of biodiversity across its managed investments. Our portfolio includes more than 250,000 hectares of conservation area,¹¹ on which there are over 200 threatened or vulnerable plant and animal species on or near the asset. Additionally, 90% of assets have a conservation program in place.

As a founding signatory to the [Finance for Biodiversity Pledge](#), New Forests is committed to protecting and restoring biodiversity through our financial activities and investments, encouraging other companies to join the Pledge, and calling upon world leaders to take action on biodiversity conservation. Specifically, the Pledge has [five components](#) (Figure 1) that New Forests will address by 2024 at the latest. New Forests believes that biodiversity is crucial to the ecosystems where we invest and that healthy, diverse systems provide benefits to our assets, leading to increased commercial performance and resilience over the long term.

Collaboration and Knowledge Sharing

New Forests is a member of a variety of industry associations and networks, through which we engage with our peers to advance sustainability. For example, through the World Business Council for Sustainable Development, New Forests participates in working groups to advocate for expanding sustainable forestry practices and nature-based solutions for climate change. New Forests regularly works with researchers and others to share information about our experience in biodiversity conservation, including using metrics, targets, and innovative financing approaches.

Engaging with Companies

New Forests' corporate sustainability framework ensures biodiversity is integrated throughout investment and management processes. New Forests does not tolerate deforestation, destruction of High Conservation Values (HCVs),¹² biodiversity and nature loss, or adverse land use changes across our managed investments.

New Forests requires third-party certification on all the forestry investments we manage. New Forests has first preference for the Forest Stewardship Council® (FSC®)¹³ Forest Management certification and manages investments across more than 755,000 hectares¹¹ of FSC certified forests. FSC has strong safeguards for biodiversity and nature protection, including required conservation areas and maintaining and promoting HCVs. In emerging markets, New Forests also requires compliance with the IFC Performance Standards (PS); adhering to IFC PS 6 includes applying biodiversity safeguards such as the mitigation hierarchy and identifying and ensuring management of Critical Habitat.

New Forests supports our third-party property managers and investee companies to comply with certification

requirements and develop additional conservation programs. New Forests guides these initiatives to ensure that the promotion of biodiversity and conservation management is aligned with strategic plans for each investment.

Assessing Impact and Setting Targets

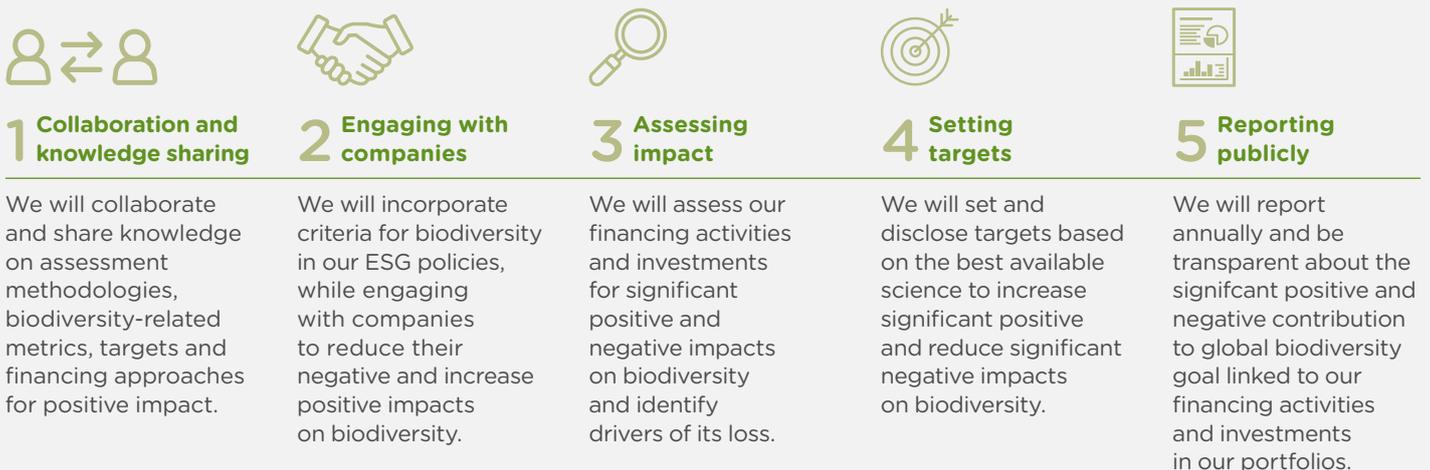
New Forests uses our Sustainable Landscape Investment (SLI) framework to track biodiversity using key metrics, including Biodiversity Conservation Programs; Biodiversity Monitoring; and Rare, Threatened, and Endangered Species. New Forests also incorporates these SLI metrics into our annual strategic planning process, encouraging third-party property managers to set targets around biodiversity, if relevant. However, quantified measures of biodiversity are challenging to use at a large scale across New Forests' portfolio. This is because these measures often require additional data collection, and it can take years before measurable changes in biodiversity can be observed. Instead, New Forests typically works with local property managers to set site-specific management objectives and to assess progress toward these goals over time. Examples of New Forests' biodiversity management and measurement can be found in the case study boxes.

Reporting Publicly

New Forests' annual public Sustainability Report highlights biodiversity case studies and reports on the implementation of conservation management programs and biodiversity initiatives across the investments we manage.

New Forests is committed to protecting and enhancing nature and biodiversity across our portfolio and all investments we manage. Biodiversity is critical to a sustainable future and New Forests will work to address nature conservation across our managed investments and encourage peers to do the same.

Figure 1 - Finance for Biodiversity Pledge Pillars





LONG-TERM SUN BEAR MONITORING IN INDONESIA

Hutan Ketapang Industri (HKI), a large-scale rubber plantation in West Kalimantan, Indonesia, has been conducting sun bear surveys since 2017 to better understand the resident population.

Sun bears are a vulnerable species; therefore, researchers wanted to know if HKI could support the bears and reduce potential stressors. The team conducts an annual survey to collect information on the bears' habits; field surveys identify evidence of bears such as scratches on trees, scat, nesting sites, and other indicators. Over four years, the team was able to determine that, while the presence of sun bears is increasing at HKI, human-induced pressures remain from past degradation of habitat and ongoing potential impacts from neighbouring communities. HKI is working to increase awareness of sun bear habitat and movement corridors by providing conservation forest signage and is restoring habitat areas and riverbanks to encourage population growth.



TASMANIAN DEVIL RESEARCH

Forico, the manager of one of New Forests' Australian assets, is collaborating on a research study with the University of Tasmania to better understand Tasmanian devil facial tumour disease. Tasmanian devil populations have been declining due to the disease and the species is now considered endangered.

The Tasmanian devils that live on the Forico-managed estate are more resistant to the disease than those in other parts of Tasmania, making it an area of scientific interest. Forico will adjust the harvesting schedule on the site to accommodate the Tasmanian devil nesting areas used during the breeding season to support ongoing research and population growth. New Forests looks forward to the results of the research and its potential to support recovery of the Tasmanian devil population.



PARTNERING WITH BIRDLIFE AUSTRALIA FOR SPECIES MONITORING

The Forestry Investment Trust (FIT), a eucalyptus plantation estate of 260,000 hectares located across Australia, is committed to long-term biodiversity monitoring and conservation.

Since 2015, PF Olsen Australia, FIT’s property manager, has partnered with Birdlife Australia to track the number of bird species present on the properties. The objective of this partnership is to develop objective data to ensure that the management estate maintains or enhances bird diversity across the estate. Five years of data in Victoria and three years in Western Australia has found that hardwood plantations are important refuges for wildlife in fragmented landscapes. Professional and amateur observers survey three types of forests: plantation sites, remnant habitat patches in plantations, and control sites in a nearby national park. The surveys indicate that FIT’s native vegetation remnants have similar numbers of birds (Figure 1) with a greater diversity of endemic (locally specific) birds (Figure 2) than paired sites in adjacent national parks and state forests and that biodiversity is being maintained. Plantation areas have fewer birds and less birdlife diversity; however, for some species they are providing important habitat. In aggregate, the mosaic of land cover types including plantation and remnant vegetation provides habitat for a greater variety of bird species. More than 100 bird species have been observed since the start of the study in Victoria and 71 species in Western Australia. In 2020 FIT agreed to extend the study for an additional five years.

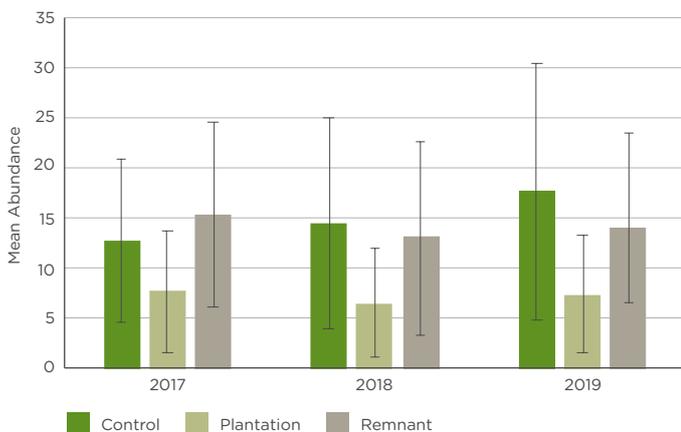


Figure 1: Mean Birdlife Abundance¹⁴ with standard deviation within the Western Australia forests of the FIT asset. The comparison is between paired sites. Plantation sites are planted blue gums (*Eucalyptus globulus*) aged 0–15 years; remnant sites are patches of native vegetation on FIT-owned land; and control sites are native forest in adjacent national parks and state forests.¹⁵

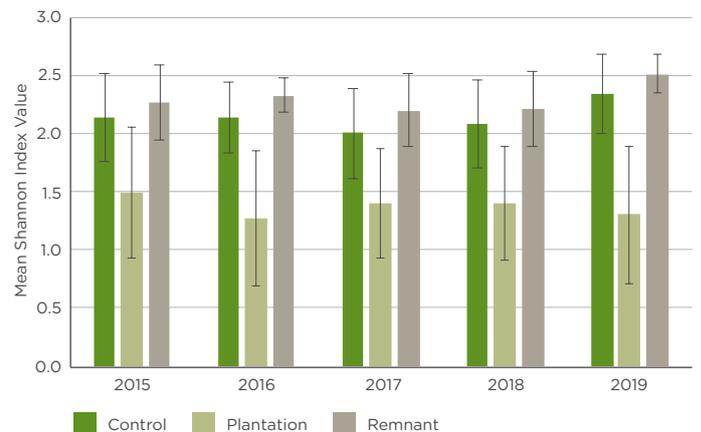


Figure 2: Mean Shannon Biodiversity Index¹⁶ for birdlife surveys with standard deviation within the Victorian forests of the FIT estate. The comparison is between paired sites. Plantation sites are planted blue gums (*Eucalyptus globulus*) aged 0–15 years; remnant sites are patches of native vegetation on FIT-owned land; and control sites are native forest in adjacent national parks and state forests.¹⁷

GIVING A HOOT ABOUT NORTHERN SPOTTED OWLS

Northern spotted owl populations are declining in the Pacific Northwest region of the United States due to habitat loss and competition from other owl species.

The owls live in forests with old-growth conditions, such as areas with varied-aged trees and multi-layered canopies; therefore, maintaining such forest areas is critical to their survival. Government regulation and environmentally conscious forestry practices can lead to improved habitat outcomes for the owls. The US government mandates buffer zones where timber harvest is restricted around owl nests and minimum tree stocking levels in foraging habitat, while intentional forestry practices, such as thinning, can improve owl habitat by shifting the age structure to multi-age, old-growth conditions and increase foraging area.

As part of an acquisition in the region, New Forests studied forest characteristics to better understand the local northern spotted owl population and habitat. The survey identified the presence of foraging and nesting habitat on the property, as well as significant critical owl habitat on adjacent federal lands. The team built these considerations into a detailed harvest model that was used to develop a management plan that protects owl habitat. While identification of threatened and endangered species on a potential investment site may be viewed as a material risk due to regulatory restrictions and oversight, New Forests believes that with responsible forest management practices the presence of such species can be viewed as a benefit, because the management can create positive biodiversity impacts by accounting for habitat and behavioural needs. However, the costs of managing forests to promote these benefits can also be financially material, such as reducing or changing harvest regimes, performing additional biodiversity surveys to map key characteristics of the forest and measure impacts, and costs for regulatory compliance. New Forests uses forest modelling approaches to identify management regimes that optimise biodiversity conservation alongside other forest management objectives. The spotted owl planning approach showcases how New Forests commits to biodiversity best practices throughout the investment process to encourage better outcomes for vulnerable species.





About New Forests

As global demand for resources grows, there is a need to increase productivity while ensuring the conservation of the world's remaining natural forests. New Forests seeks to create investment strategies that provide lasting solutions to this challenge. Through responsible management of forests and other real assets, we create shared benefit for investors and local communities alike. We believe that meeting the needs of a broad range of stakeholder will provide better returns over the long term.

New Forests has international reach, with offices and assets in Australia, New Zealand, Southeast Asia, and the United States. This gives us a global perspective combined with local expertise that allows us to understand and manage our assets more effectively. Wherever we operate in the world, our strength lies in our people and their drive to make investments that create the best possible outcomes. By investing with integrity and transparency we aim to generate strong returns while helping tackle some of the world's great sustainability challenges.

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Corporation

New Forests is part of the Certified B Corp community, a global movement of people using business as a force for good.

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- 12 Learn more about HCV at <https://hcvnetwork.org/>
- 13 FSC is not responsible for and does not endorse any financial claims on returns on investments.
- 14 Abundance is the number of individual birds observed per transect.
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- 16 The Shannon Diversity Index reflects diversity using abundance and evenness of species present in an area.
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