



Measuring & monitoring biodiversity in
hardwood timber plantations:
A regenerative forestry case study



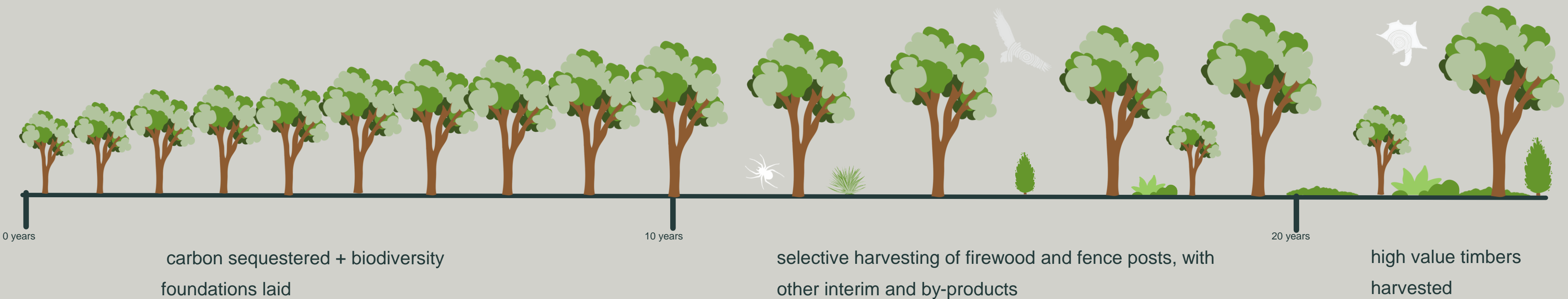
background - wood4good

- 500ha of mixed durable native hardwood species under management
- Started in 2012
- Initially to market firewood from hardwood plantations c. late '90s and '00s
- Branched out into silvicultural management, establishment & consulting
- Biodiversity was initially incidental
- Began intentional adaptations to support biodiversity
- Mission driven - seeking to achieve increased carbon sequestration, nature-positive outcomes and carbon-rich sustainable wood products
- We are calling this regenerative forestry
- Net gains of carbon and biodiversity along with commercial products and outcomes
- Regenerative businesses believe it is their role to improve the function of critical biological systems



what are we doing differently?

- Perpetual
- Encourage understorey, midstorey regeneration
- Value, manage and promote coppice regrowth
- Measure baseline data
- Monitor over time
- Active ecological monitoring informs adaptive management
- Management interventions include silvicultural and ecological techniques to enhance biodiversity
- Avoid clearfelling



case study - crosbie regenerative forest



case study - crosbie regenerative forest



evidence of biodiversity gains

Baseline Ecological Assessment of the Crosbie Plantation, Toolleen, Victoria

Prepared for wood4good & The City of Greater Bendigo

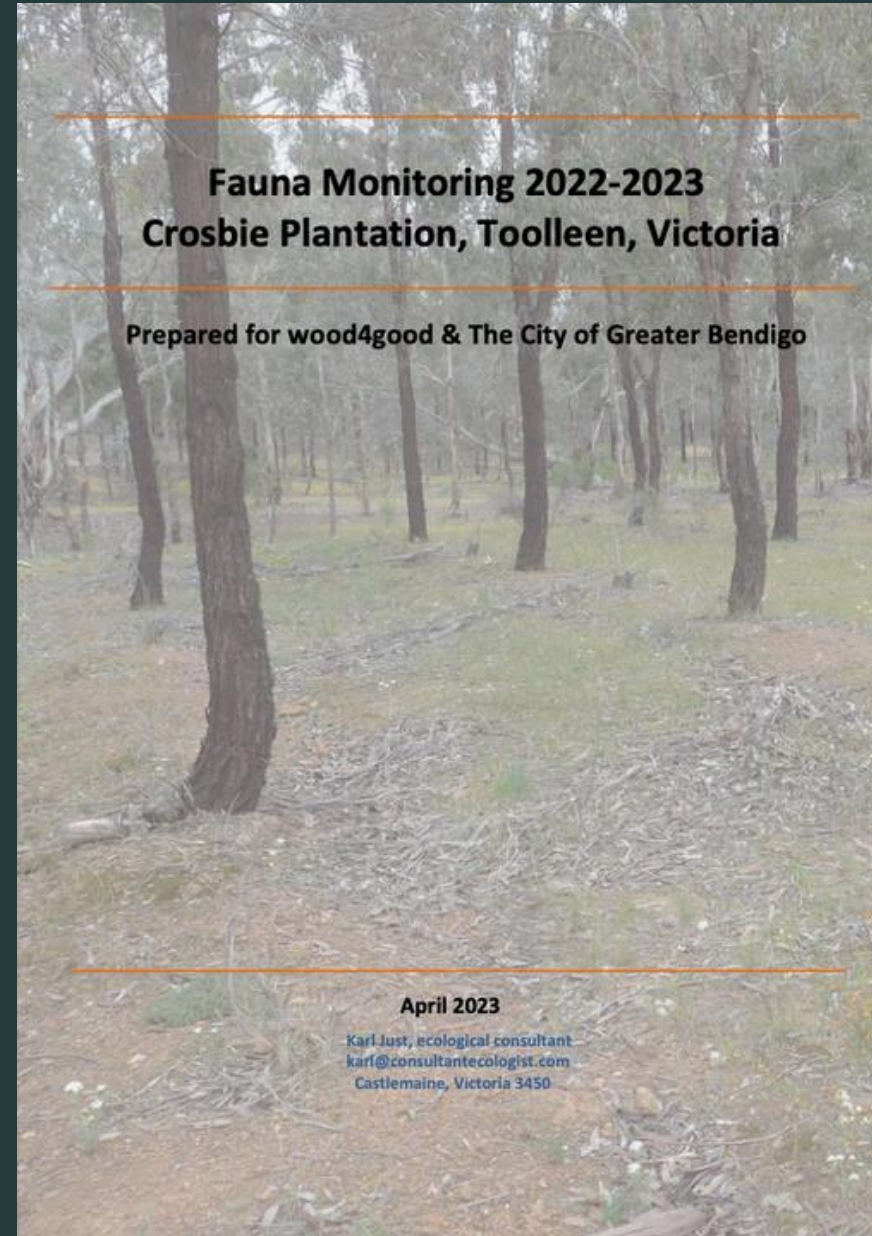


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Fauna Monitoring 2022-2023
Crosbie Plantation, Toolleen, Victoria

Prepared for wood4good & The City of Greater Bendigo



April 2023

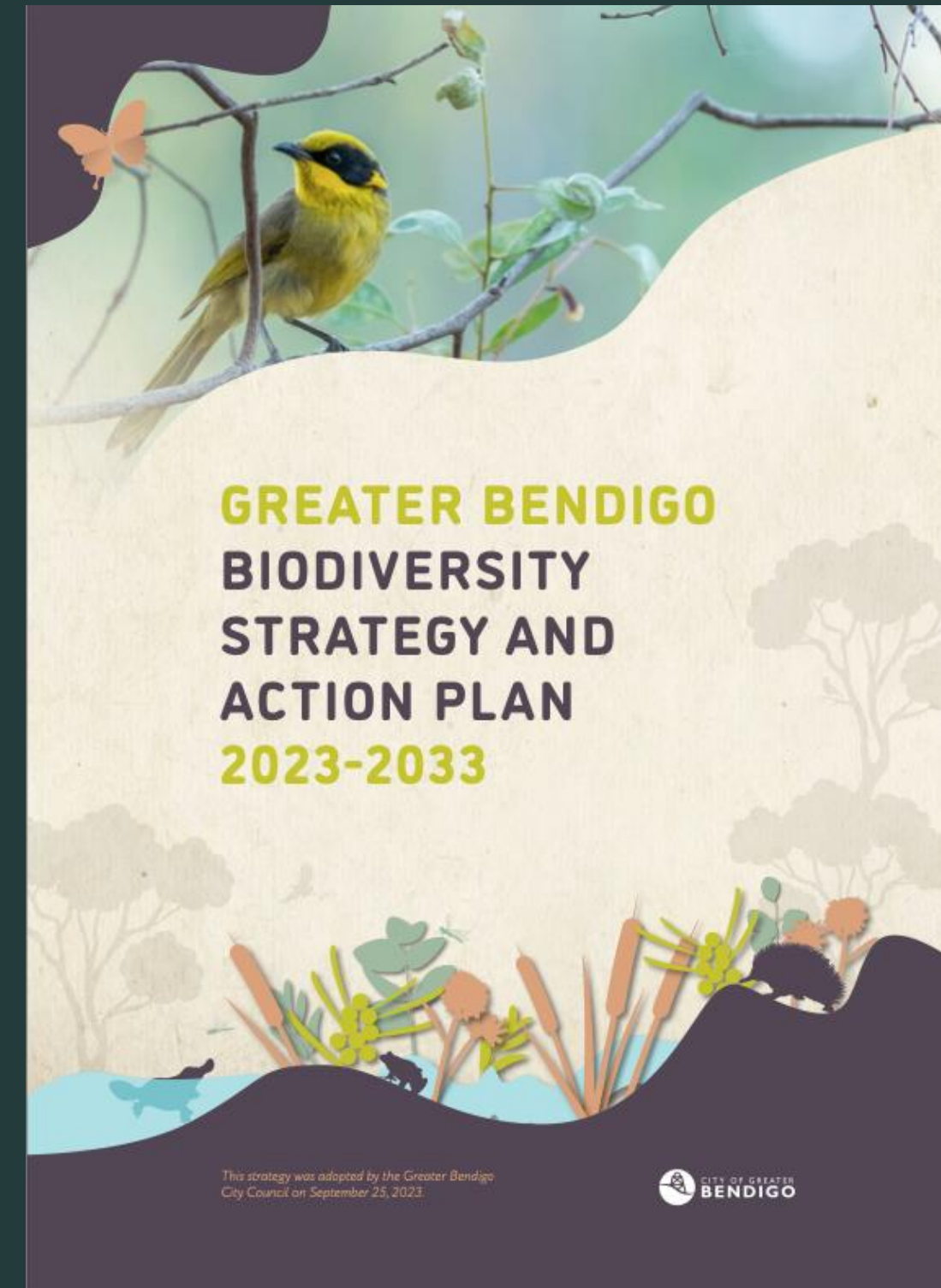
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- These studies demonstrated more than 250 vascular plants, and vertebrate animals
- Including 10 threatened species
 - Diamond Firetail Finch
 - Black-chinned Honeyeater
 - Black-eared Cuckoo
 - Brown Treecreeper
 - Ausfeld's Wattle
 - Buloke
 - Plains Joyweed
 - Late-flower Flax-lily
 - Bibrons Toadlet
 - Striped Legless Lizard



next steps at Crosbie

- Formulate a comprehensive strategy for enhancing biodiversity at Crosbie
- Comprehensive monitoring of bryophytes, epiphytes, funghi, reptiles , nocturnal birds and invertebrates
- Feral control
- Partnership development for ongoing monitoring and verification
- Conduct adaptive interventions
- Develop consistent reporting models for project client
- Explore how to account for other ecosystem benefits
- Draw on lessons from this project and apply to broader business model and other projects



adapting & applying the model elsewhere

- Early stage income from new plantations has the potential to change the financial limitations to forestry as an asset-class
- Factor biodiversity monitoring and management into financial models for future projects
- Adapt forest management plans to include monitoring and management
- Explore models to create consistent, accountable, transparent and rigorous reporting across different projects
- Find offtakes for biodiversity credits or carbon credits PLUS
- Leverage carbon and biodiversity income to increase the financial viability of new plantation assets
- Expand the forestry estate with nature positive and carbon sequestration benefits



the potential for forestry



- What is the potential impact of new forestry assets that provide a net-gain in carbon, biodiversity and climate-friendly, renewable, circular building materials?
- A place for forestry to be the “good guy”?
- Could doing more forestry be a part of saving threatened species?
- How could this shift the social licence question?
- Could this approach help reverse decline of the forestry estate?
- Could this shift in perspective help us realise the benefits of a bioeconomy in Australia?



