CCWA Citizen Science Forum

What the birds told us...

Nic Dunlop

GOVERNMENT OF WESTERN AUSTRALIA

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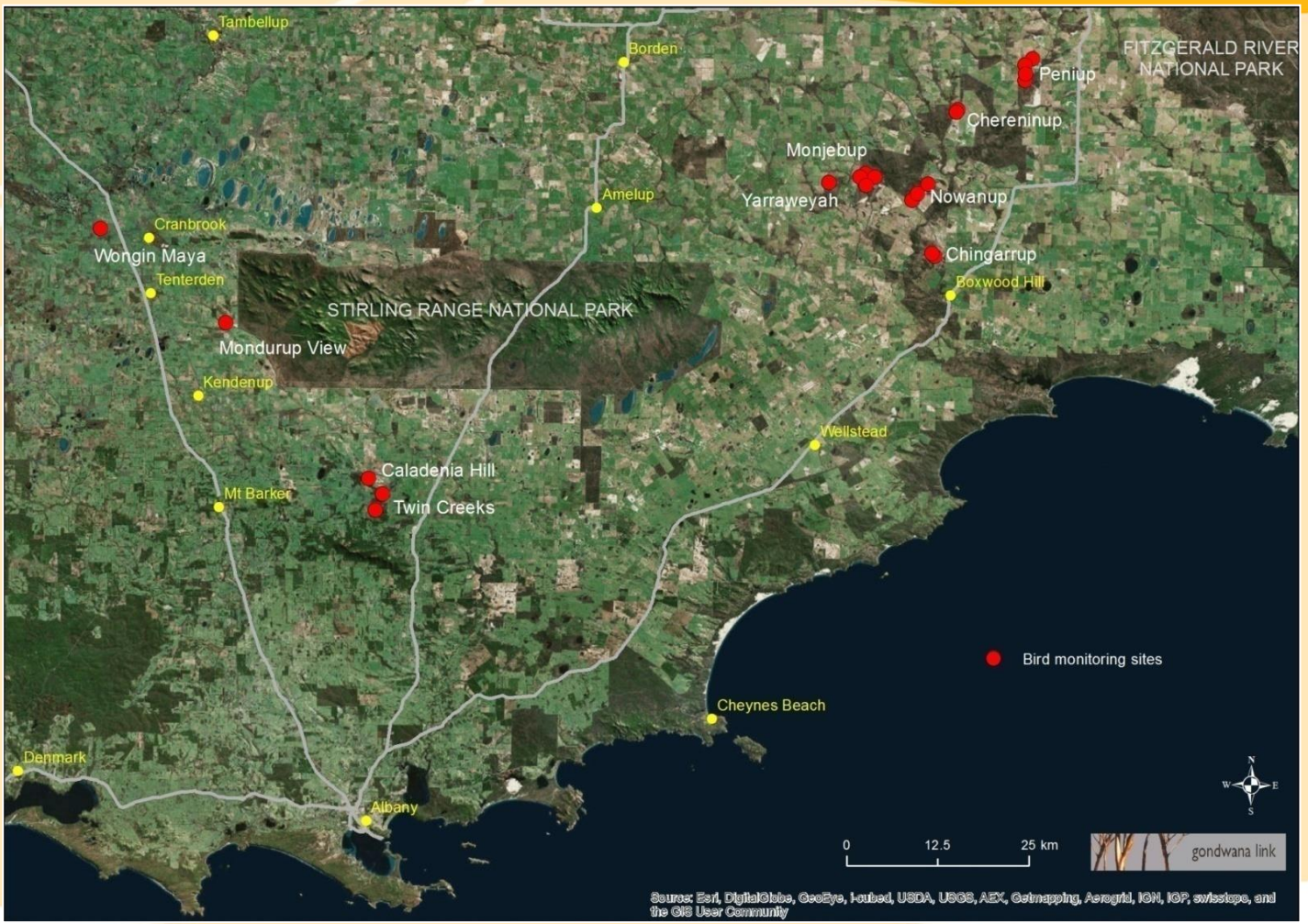
Using Bush-bird Communities as Indicators of Ecosystem Development

- Standard search bird survey method.
- Compared restoration treatments against regenerated bush ‘remnants’ in the Fitz-Stirling segment of the Gondwana Link in 2019.
- Progress of the Carbon Positive restoration at Yarraweyah.
- Compared carbon sequestration plantings, remnant York Gum woodlands and contiguous Woodlands in north-eastern Wheatbelt.

Study Area



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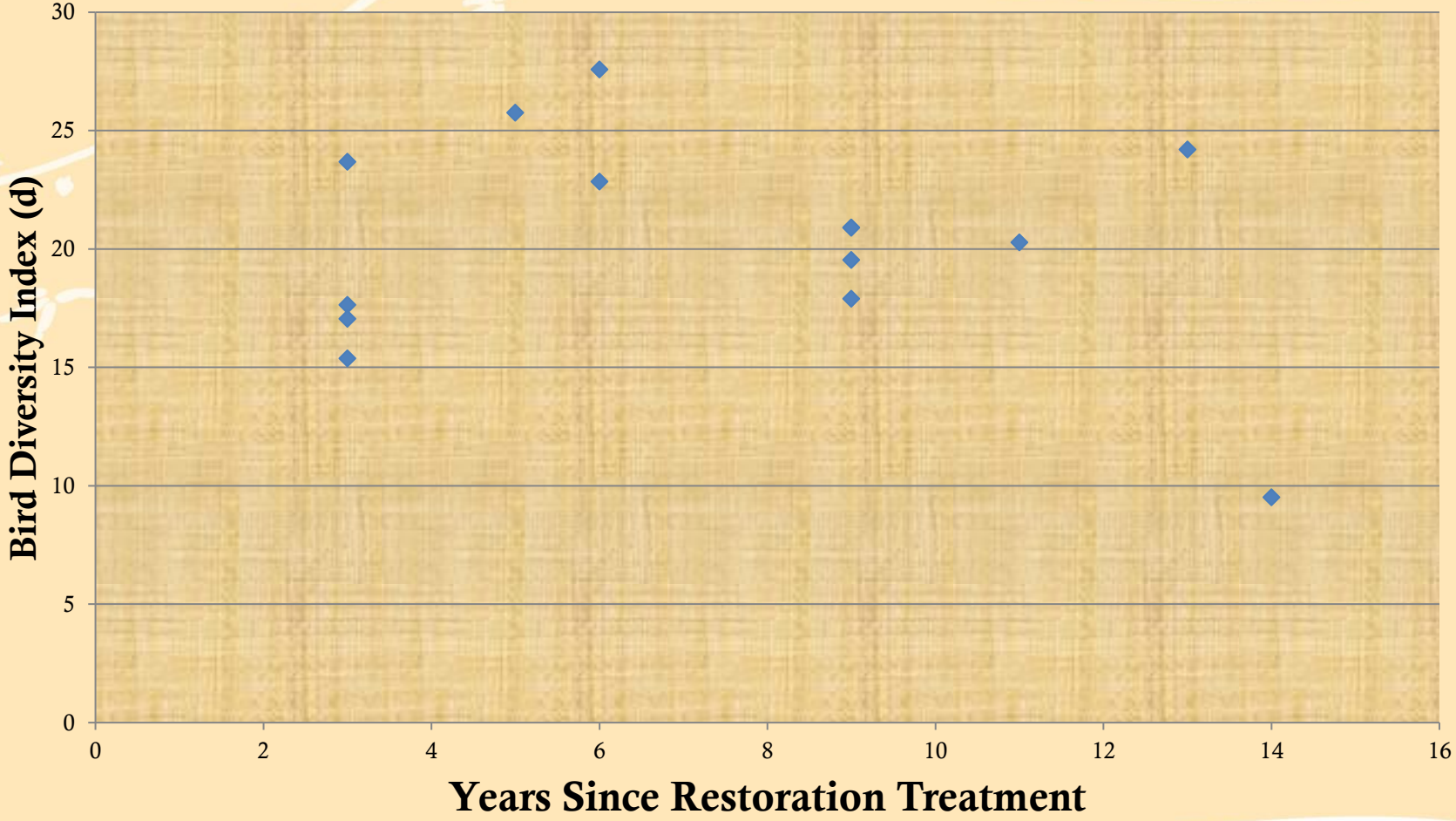
Trends in Bird Species Diversity Index at 13 Restoration Sites in 2017



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Regeneration verses Restoration

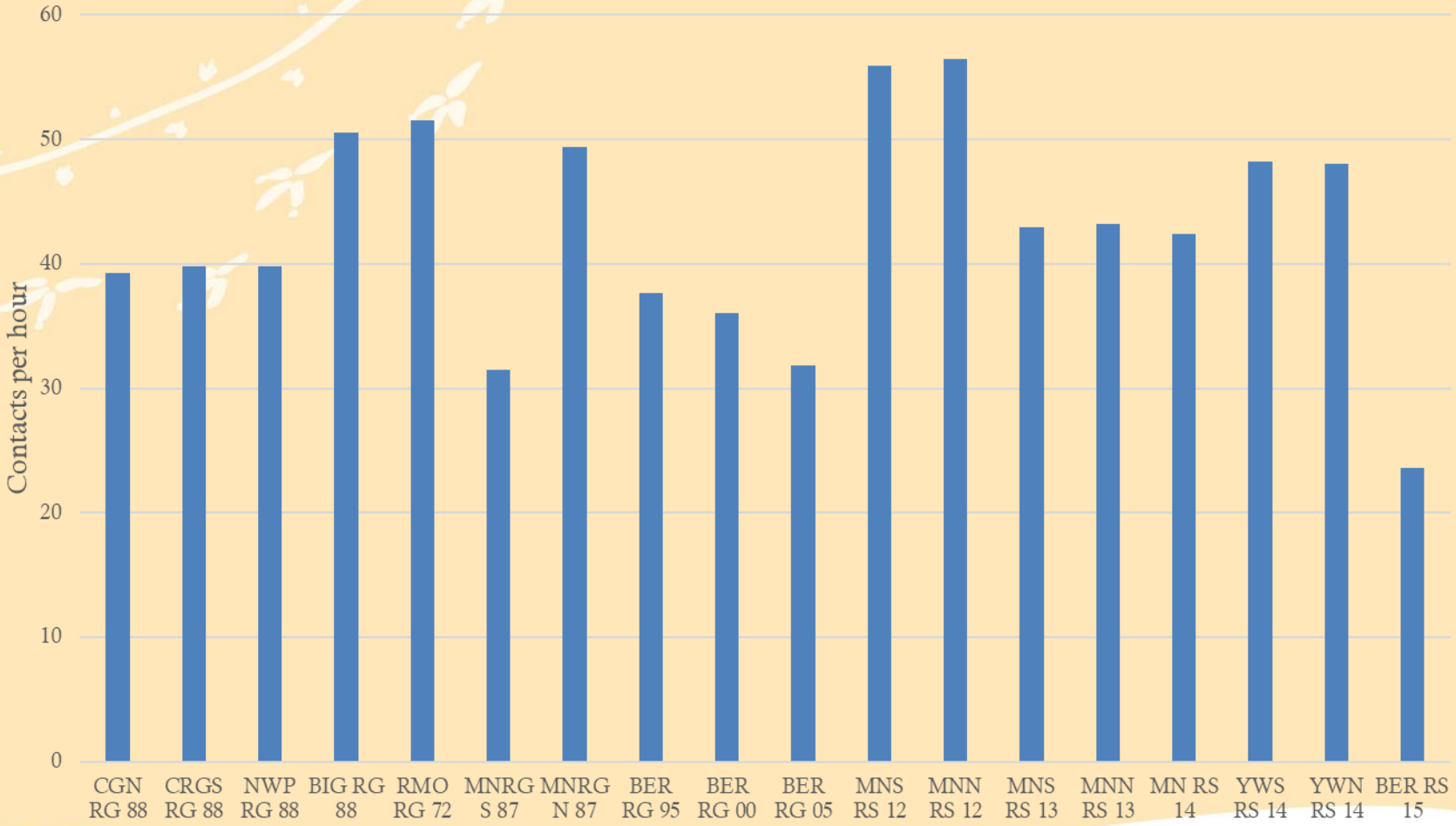
Regeneration

- Areas of mallee heath vegetation cleared at least once from the early 1970s to 2005 but not cultivated or intensively grazed. Vegetation has regenerated from rootstock and topsoil and may have been subsequently burnt.

Restoration

- Areas of cleared farmland treated to achieve restoration since 2012. These contemporary restoration sites are direct seeded with a diversity of local provenance, native plant species with minimal tilling and narrow row-spacing. Seed mixes are matched to soil types.

Abundance of Bush-birds at 10 Regeneration and 8 Restoration Sites in the Fitz-Stirling Link



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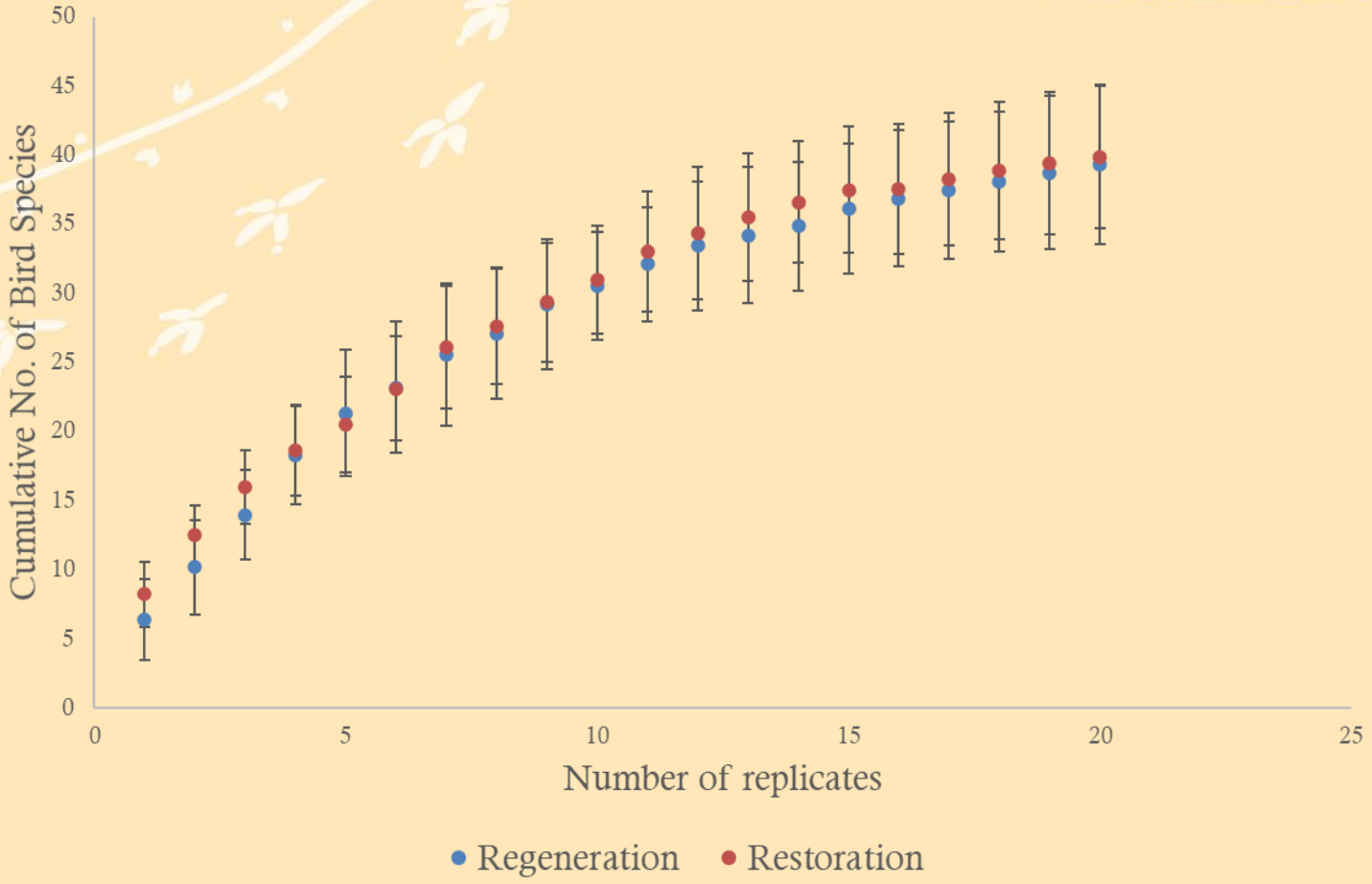
Bird community species richness against survey effort in regeneration sites restoration sites in the Fitz-Stirling Link.



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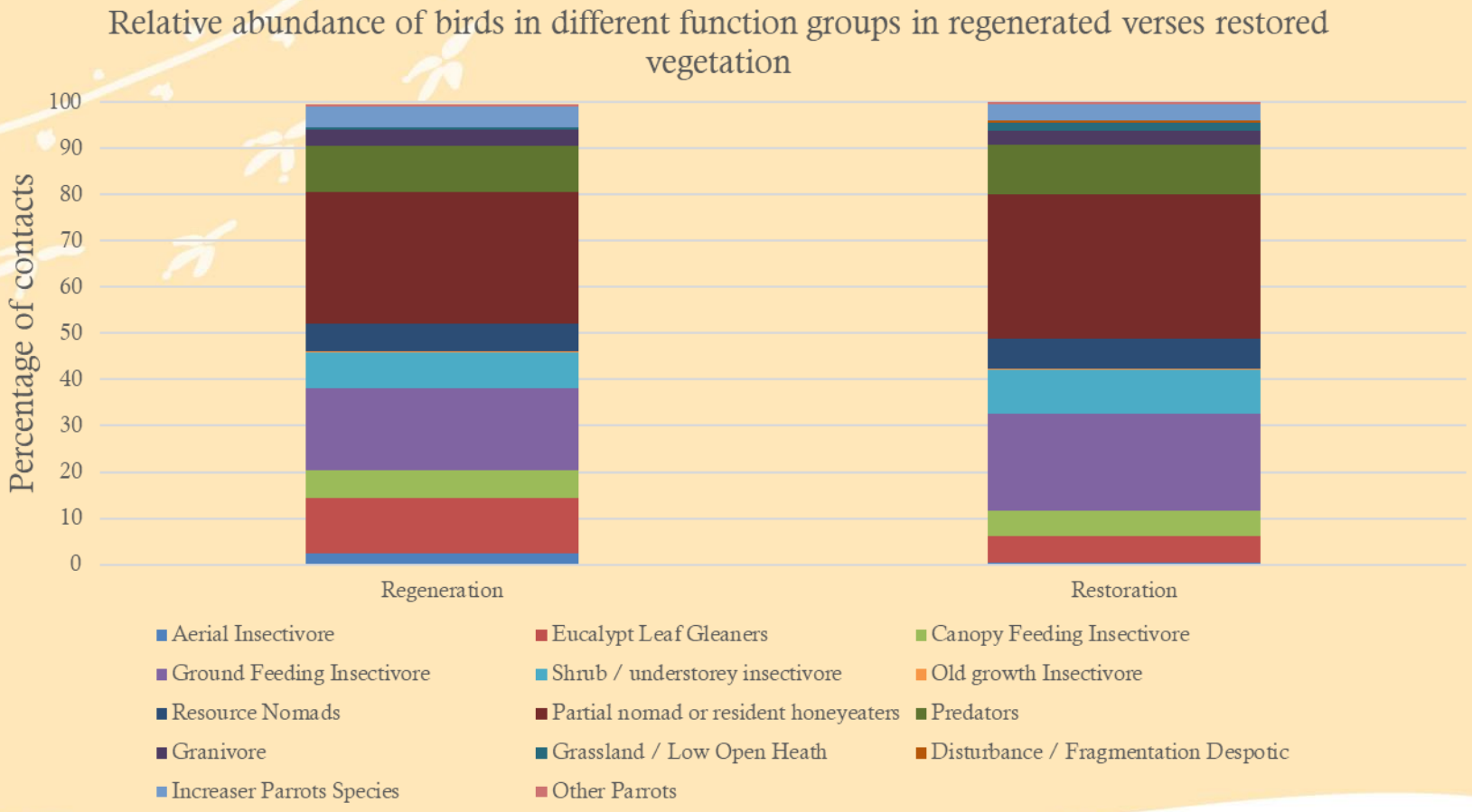
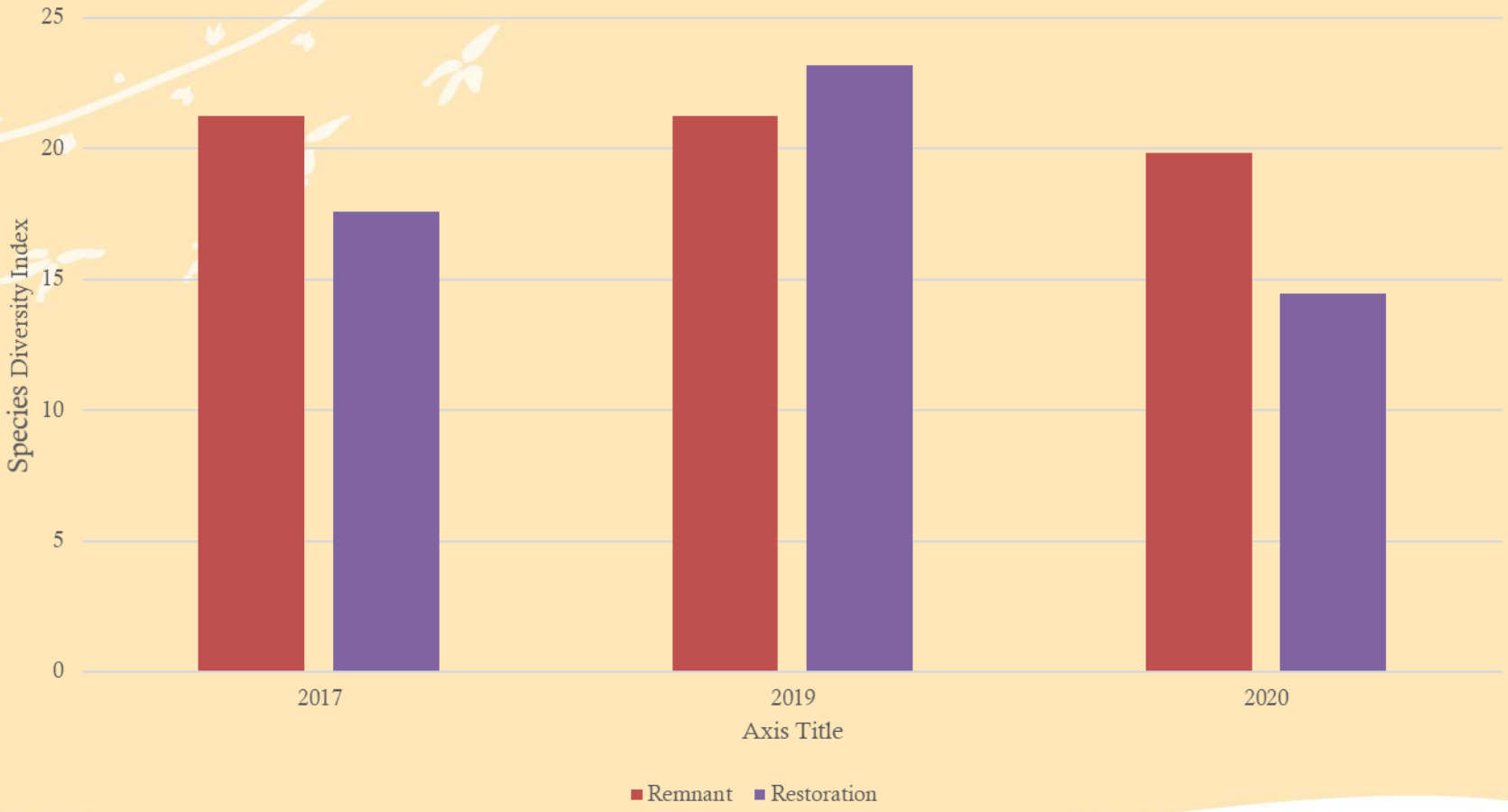
Bird functional groups within regenerated and restored native vegetation in the Fitz-Stirling Link



Changes in bird diversity index in restoration and nearby regeneration (remnant) at Yarraweyha



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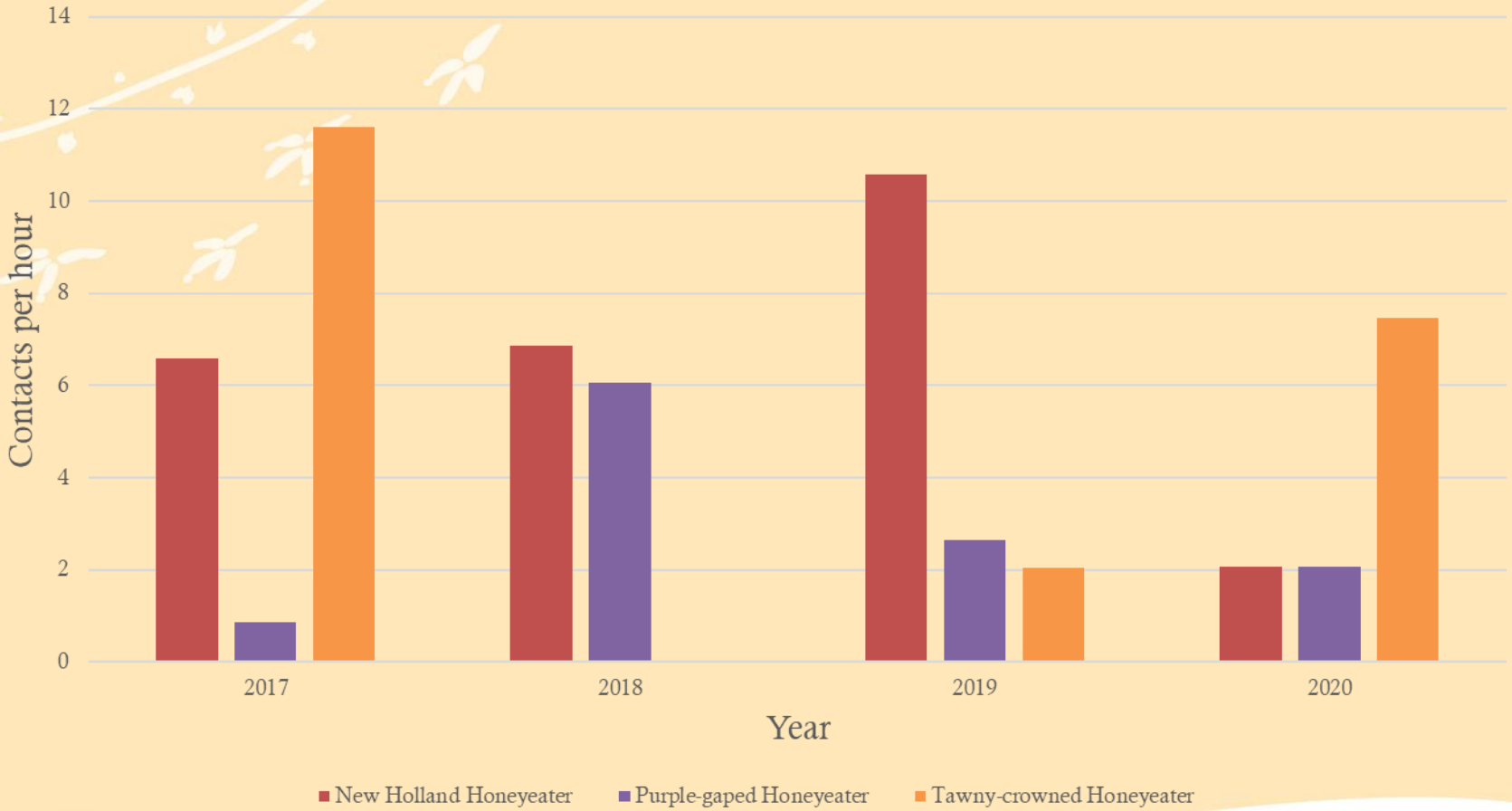
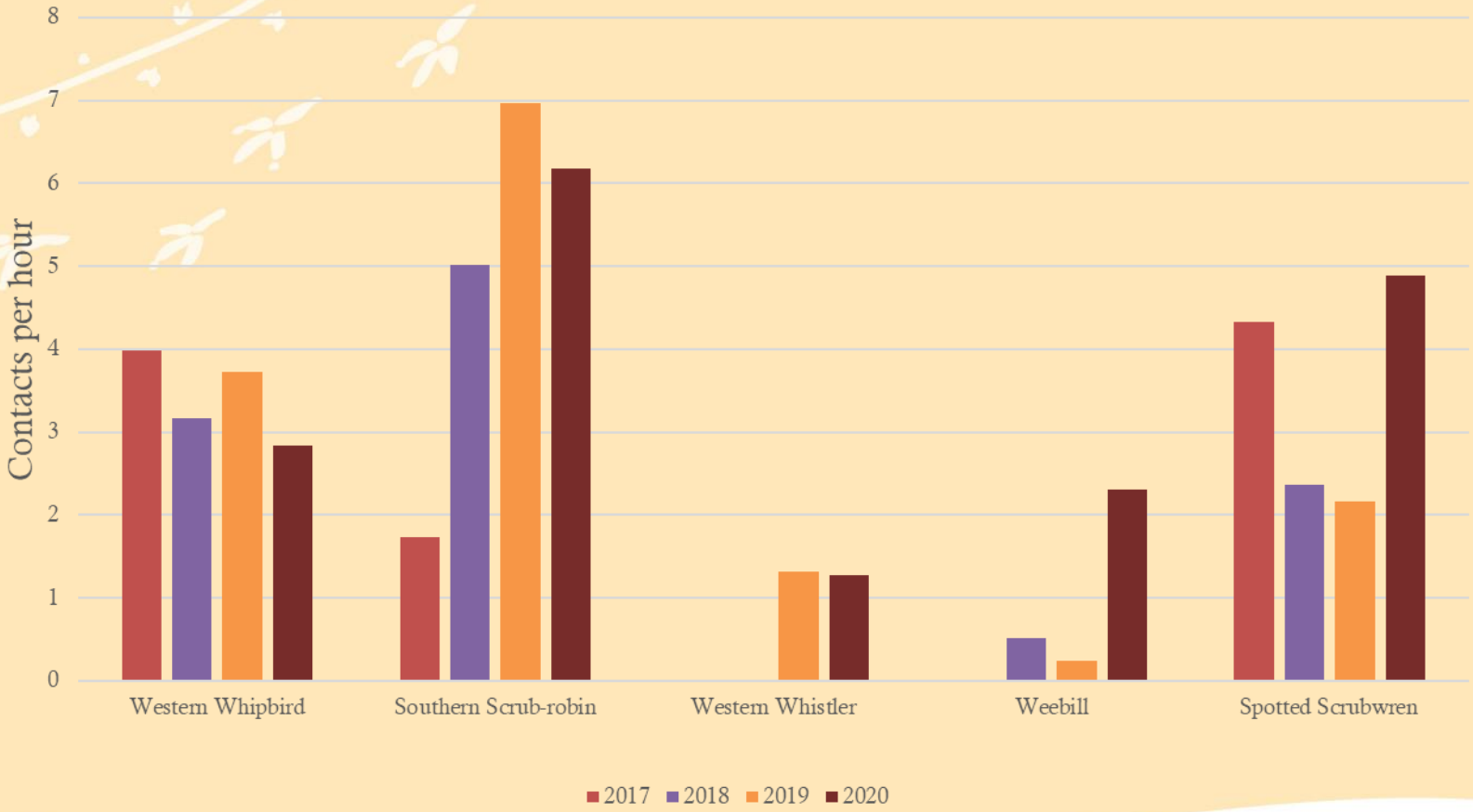
The abundance of three honeyeater species in Yarraweyah Restoration 2017-2020



Abundance of five resident insectivores in Yarraweyah Restoration 2017- 2020



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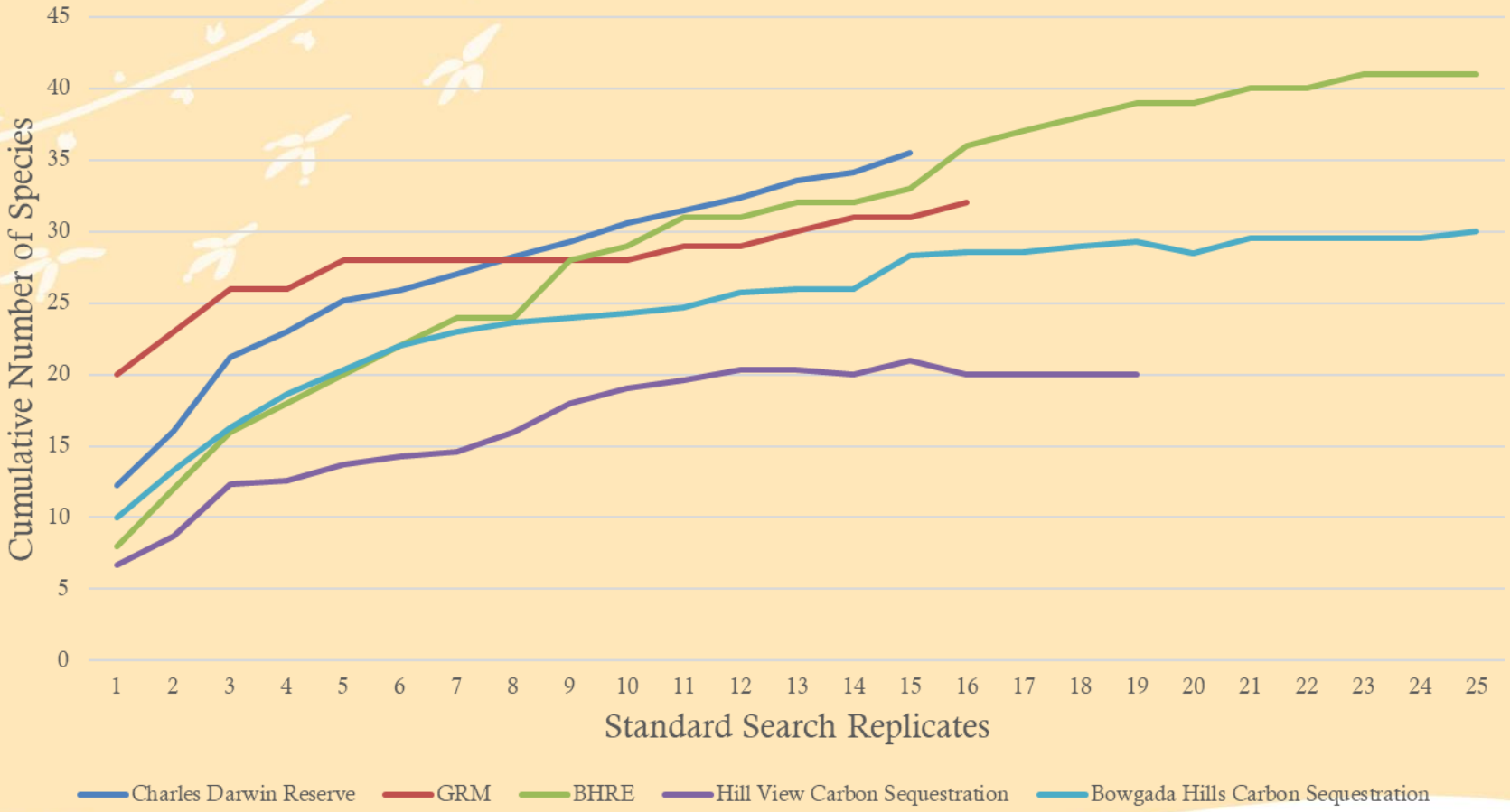
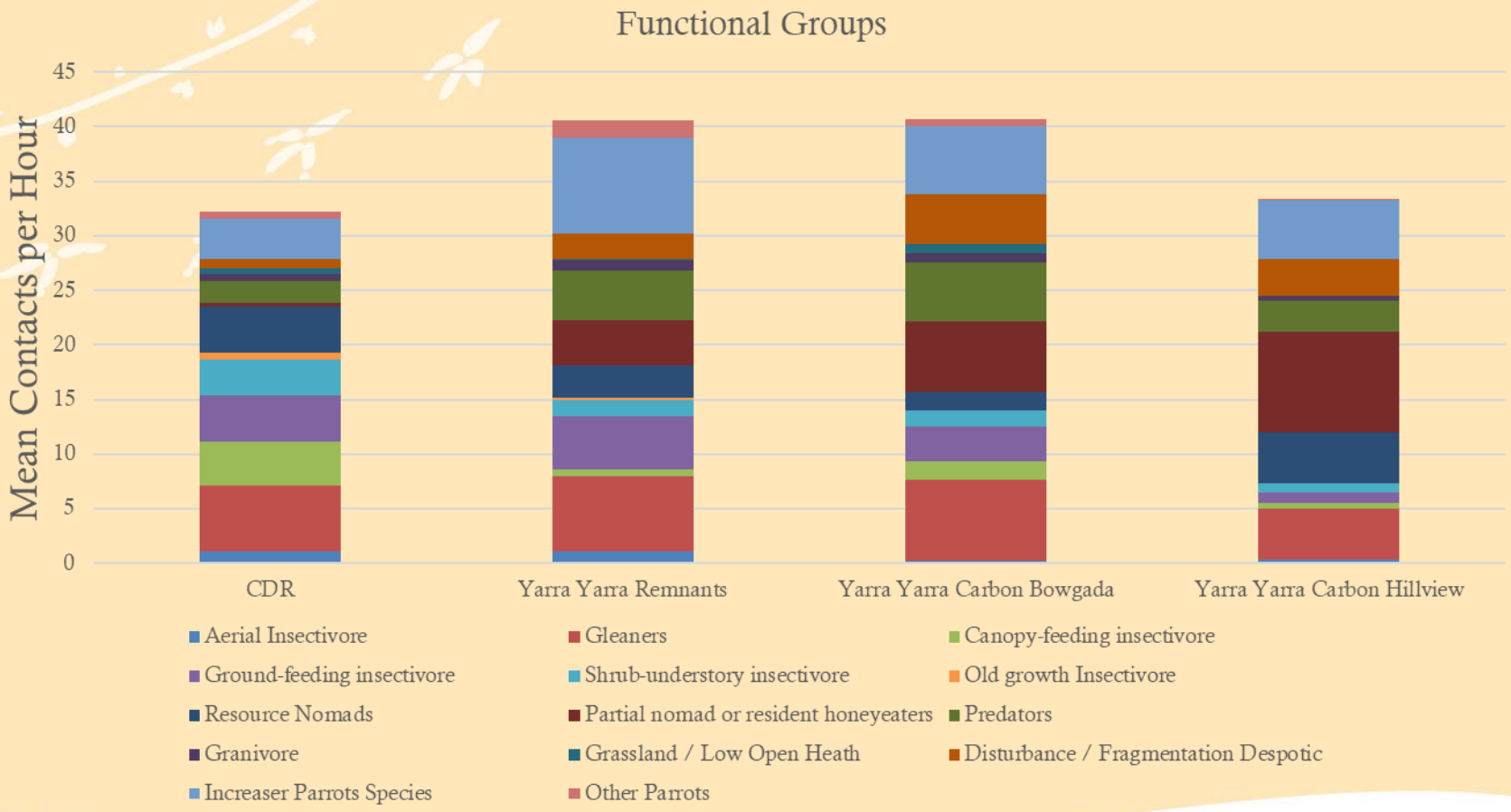
Species richness in contiguous natural woodland, remnant woodland and carbon sequestration plantings in the Yarra Yarra catchment.



Functional Groups in Contiguous Woodland, Remnant Woodlands and Carbon Plantings in Yarra Yarra Catchment



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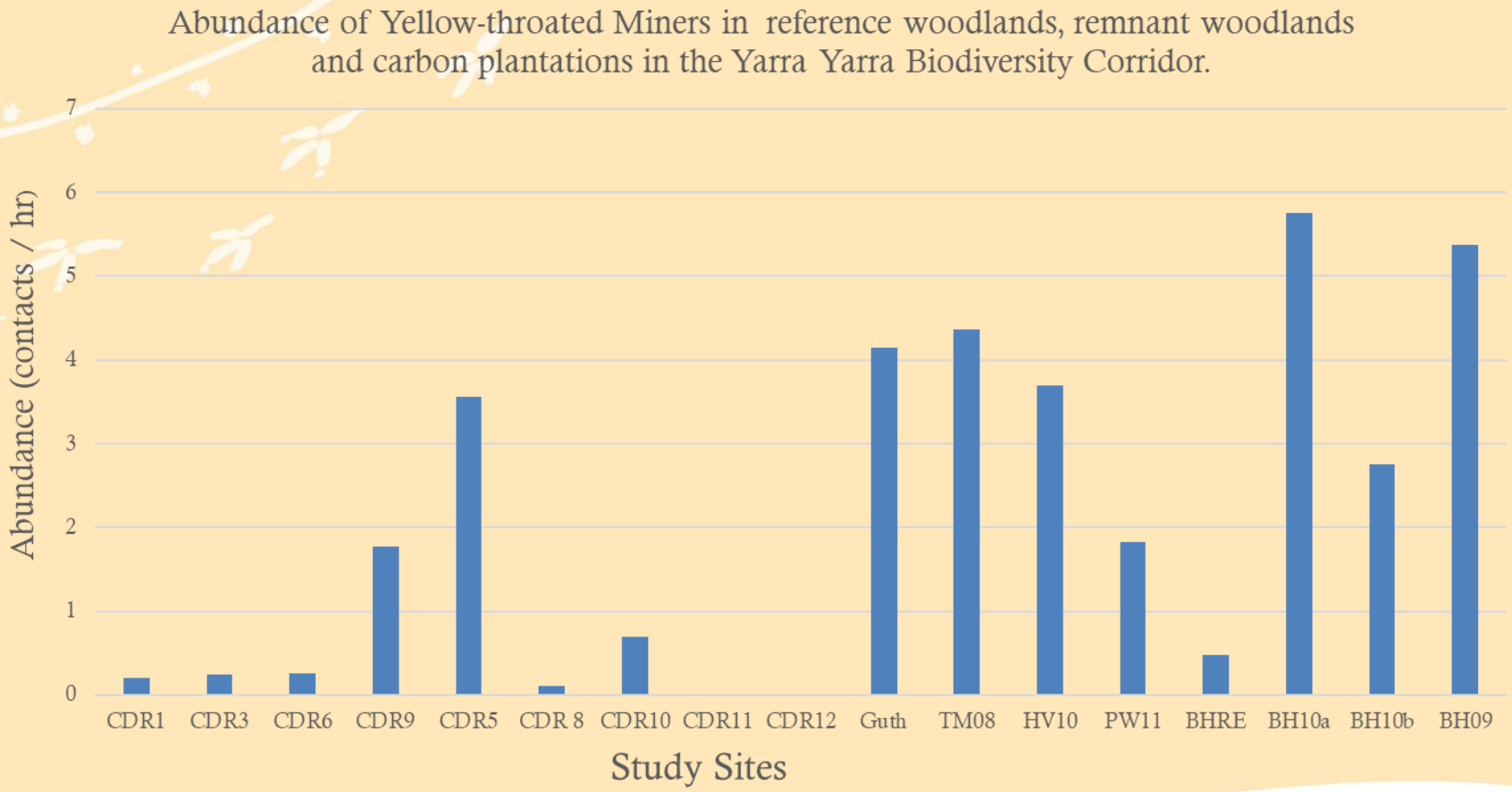
Abundance of Yellow-throated Miners in contiguous woodland, remnant woodland and carbon-sequestration plantings in the Yarra Yarra Catchment



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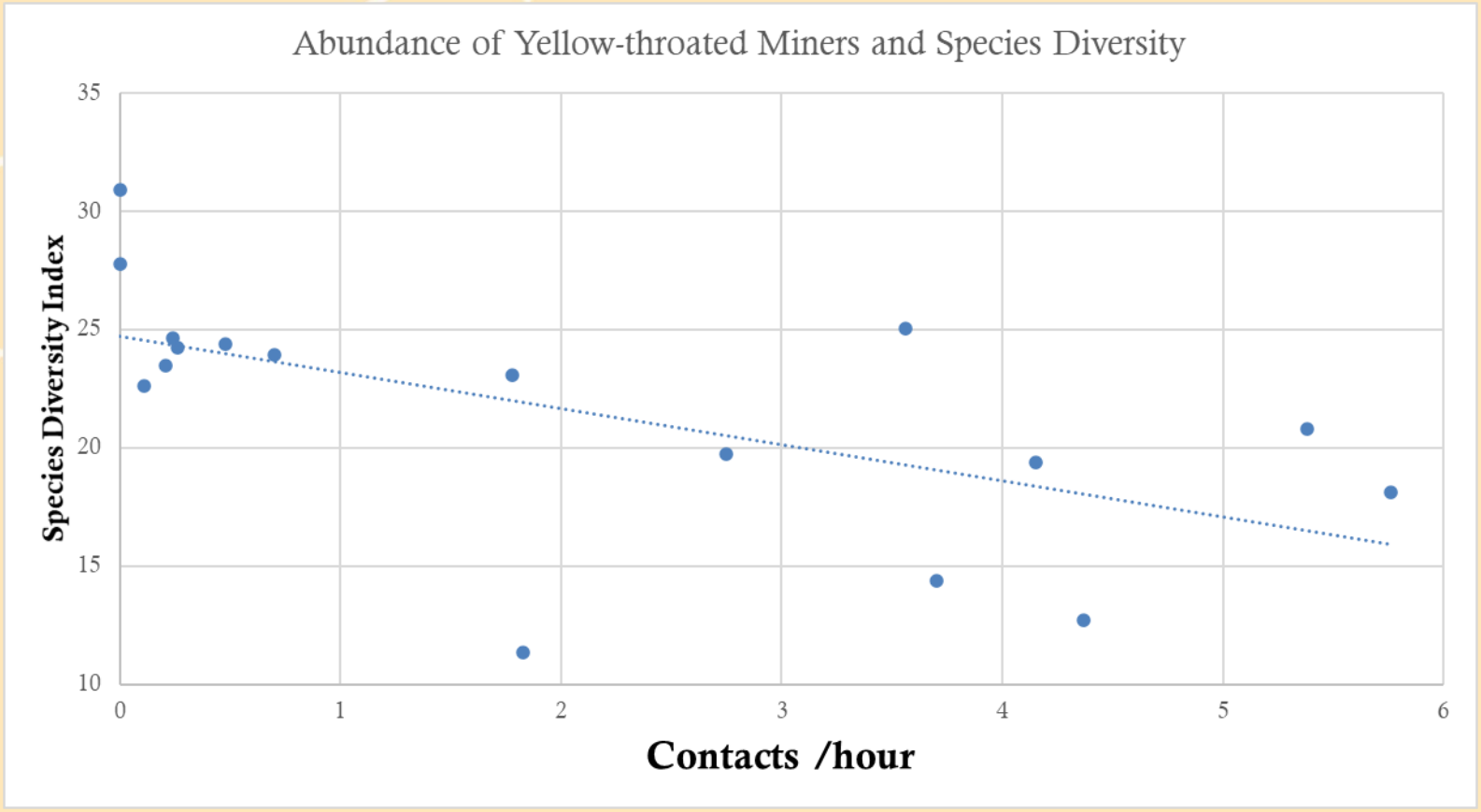
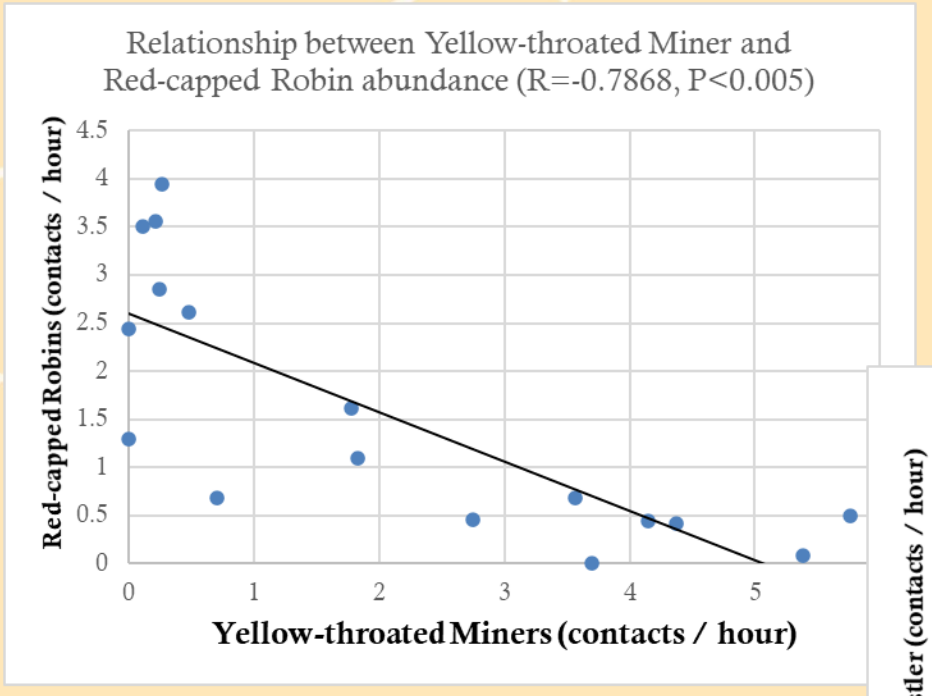
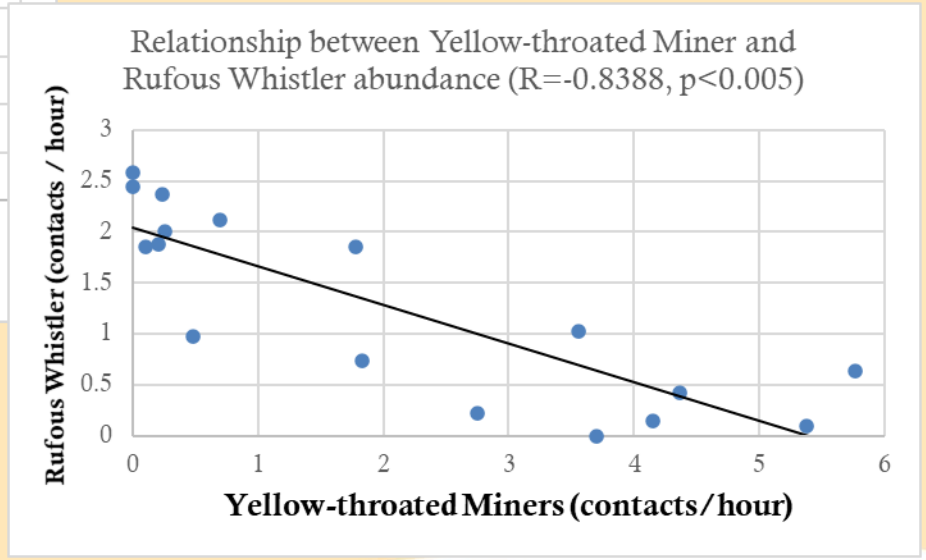
Yellow-throated Miners and bird diversity



Impact of Yellow-throated Miners on colonization by some other species.





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