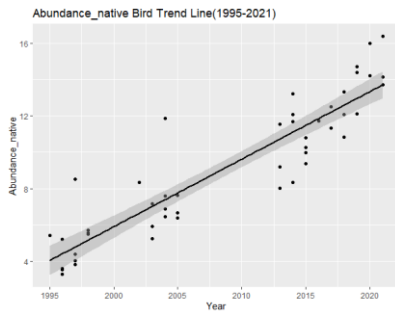# Zealandia 5MBC Data Analysis Project
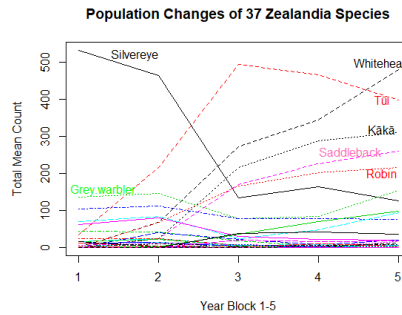
By: Dagula Lokuge & Felix Hong
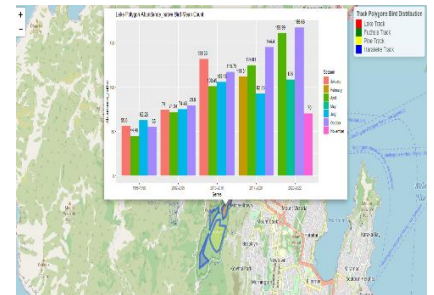
Advisor: Steve Cosgrove

Client: Dr Colin Miskelly

Zealandia Abundance_native Birds Trend Line

Population Changes of Zealandia Birds

GIS Mapping with Spatial Analysis

INTRODUCTION

This project, supported by Zealandia and Dr Miskelly, mainly focused on data analysis, mapping sites, and looking at the spatial distribution of Zealandia birds. The project uses Zealandia data from the nationally standardised '5-minute bird count'. The data were recorded from 40 count stations spread across the valley in the Karori Sanctuary. Each site has been measured quite frequently since the pre-sanctuary establishment. The project team was required to perform an analytical investigation using a data science process and a statistical programming tool. To detect the trends and patterns of the species, visualise the bird population changes, and find the correlations between the birds using the datasets obtained from Zealandia and Dr Miskelly.

SUMMARY

The project team successfully created interactive Zealandia maps with spatial distribution analysis to reveal the patterns and trends of the native and non-native birds' community.

The project team used the Scrum Methodology throughout the project life cycle. The team gathered information and expectations from the client in each meeting to adjust the analysis directions to get the best result.

The team has overcome many challenges to complete the project and gained a good learning experience and practical skills.

THE TEAM

Dagula Lokuge (Data Analyst)

- **Degree:** Bachelor of Information Technology (BIT)

- **Major:** Applied Data Science

A current Bachelor of Information Technology student majoring in data science at Whitireia, graduating in March 2022. I have over ten years of work experience in business development & sales/marketing, looking for an opportunity to kick start a data analyst career in Wellington.

Seongjoo (Felix) Hong

- **Degree:** Bachelor of Information Technology (BIT)

- **Major:** Applied Data Science

Bachelor degree student studying applied data science at Whitireia. Will finish the degree in June 2022.