

SUMMER VACATION RESEARCH PROJECT



UNSW
SYDNEY



Project Title: Do weather patterns predict at-sea pelagic bird distributions?

Supervisor: Professor Richard Kingsford

Synopsis: Seabirds are considered the last ornithological frontier, given the paucity of information known about them in comparison to other taxonomic orders of birds. This is not surprising, since they live the majority of their lives out of view of shore and only visit land to nest on remote islands. Our current understanding of seasonal patterns and occurrences is gleaned from expensive surveys which run transects to survey for seabirds at sea, as well as biological studies of known breeding colonies. However, many seasonal patterns of occurrence and their relationships with weather remain unknown. Hobbyists, such as birdwatchers, frequently run 'pelagic trips' in order to view the difficult-to-see seabird species. This project focuses on pelagic bird patterns and distributions along the eastern coast of Australia.

We will use historical pelagic trip reports, provided by people who organize pelagic trips for birders, in order to investigate seasonal patterns of occurrence, and relate these to weather patterns. Historical weather data (e.g., temperature, wind patterns, surface sea temperature) will be investigated as explanatory variables. Ultimately, this will provide some of the first insights into the seasonal occurrences of pelagic birds in relation to weather in Australia. The ideal applicant will be passionate about seabirds and have some familiarity with GIS and R softwares.

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