Kristin Jinks

BSc Hons

kristin.jinks@griffithuni.edu.au

orcid.org/0000-0002-1899-3704

https://researchgate.net/profile/Kristin_Jinks

Summary

The Great Barrier Reef World Heritage Area contains approximately 9% (35,000 km2) of the world's known seagrass area and deep-water (growing at depths >15m) seagrasses make up 90% of these meadows. Seagrass meadows provide essential ecosystem services, including fisheries production, coastal protection and nutrient cycling, and they provide habitat for iconic species of conservation concern such as dugongs and turtles. Understanding and valuing the natural biodiversity of ecosystems that provide important services is of global concern, yet we have little knowledge of the value of deep-water seagrasses. With seagrasses declining at a global rate of more than 100km2 per year it is important we understand their full value. My project aims to find a solution for a significant problem – the accelerated loss of seagrass meadows and adjacent habitats, with a focus on providing valuable information on the lesser-known deep seagrass meadows. I am investigating the trophic pathways of shallow and deep meadow seagrasses and using stable isotopes I aim to determine how carbon from seagrass and micro-algae is utilised by commercially important species, and those of conservation concern. As part of my project I will use a novel method of experimental isotope labelling of seagrass and algae, relatively new to ecology.

Research Expertise

- Ecological connectivity and resilience theory
- Seagrass ecology
- Stable isotopes
- Food webs