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Temae Golf Course Surveys

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Island Sustainability Pro...



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We use this protocol and it's working

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Abstract

This study investigates the ecological impacts of land use change, particularly focusing on the vegetation near the Temae Golf Course on Moorea, French Polynesia. Through field surveys conducted by the 2024 Island Sustainability Program cohort, we compare plant diversity and composition in pristine and cultivated areas adjacent to the golf course. Our findings highlight significant differences, with cultivated areas exhibiting lower diversity and a higher proportion of introduced species. These results underscore the potential risks associated with tourism-driven land development, including the introduction of invasive species and the loss of ecosystem resilience. By shedding light on these impacts, our study emphasizes the importance of integrating conservation efforts with tourism development to ensure the long-term sustainability of Moorea's ecosystems.

Guidelines

Avoid trespassing on private property; if care is not taken, you may end up on golf course property or local backyards.

Materials

- Field notebook and writing utensil
- Camera/device capable of photography
- Method of plant identification (textbook, app like iNaturalist, etc.)
- Transect tape



Field Methods

- 1 Split group into pairs
- 1.1 Assign each pair a "cultivated" (on/near golf course) site and a "pristine" (anywhere else in close proximity) site
- 2 Conduct 50 meter transects at each site
- 2.1 Note starting point and direction of movement in field notebook, and walk in a straight line in that direction for the duration of the transect
- 2.2 One group member measures distance, and the other photographs plant species. Both group members look for new plant species within 1 meter of each side of the transect line.
- 2.3 If unable to complete the full 50m transect, note that and mention why
- 2.4 Repeat at other site (either cultivated or pristine, whichever you haven't already completed)

After fieldwork

- 3 Identify plants from photos taken in the field
- 3.1 Groups either used available textbooks or iNaturalist
- 4 Compile all pairs' data in a common Google Sheet ([linked here](#))

Protocol references

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ISP 2024 Cohort