F26.37 IUCN Red List Evaluation of Rapa Nui Endemic Arthropods

Overview

The I2S student will import habitat map data for fern gardens (Blechnum paschale) into a GIS to quantify the habitat extent within the known type locality of the nine island- and Polynesian-endemic species. These data will be used to conduct IUCN Red List assessments for these native taxa. Given the restricted habitat, it is likely all species will qualify as IUCN Critically Endangered. Quantifying habitat extent—used here as a proxy for population size—is essential for conducting these evaluations.

What the student will DO and LEARN

Student will take the undergraduate GIS course offered in the fall through Forestry. S/he will use this project as their final project for the class. Thus, the student will complete the analysis in the fall. Spring semester will be devoted to submitting all information to IUCN (under the supervision of the instructor) so the nine species may be evaluated. This will be done in concert with preparing their science poster and video presentation. Thus, they will be trained to use GIS, have experience in IUCN Red List Assessments, and go through the entire process of developing a science poster and developing a video presentation.

Additional benefits

They will have a more cogent understanding concerning how plants and animals are evaluated for listing as threatened or endangered.

Additional qualifications

Knowledge of GIS and R-programming would be ideal. **Time commitment** 4 hrs/week for 30 weeks