**Species extinction risk in the Australian Wet Tropics: Quantifying the effects of climate change on species interactions**

Climate change and human induced activities are causing pronounced shifts in ecological communities around the world. For example, global warming directly impacts some species and indirectly affects other species through interactions with the directly affected species. As a sixth mass extinction is already well under way, there is an increasing need to predict how species interact in their community under these new environmental constraints. Predicting species interactions is a critical tool to forecast shifts in ecological communities and identify species that are at the highest risk of extinction. However, for most species we know little about how they interact with other species in their communities and without considering an ecosystem’s entire community, we risk overlooking the contribution of interactions among species to the fate of all species in the community. Thus, quantifying how species interact in their community is important for predicting the entire community’s plausible responses to changed environmental conditions. Nevertheless, there is generally a lack of empirical data on species interactions compared to other data used to predict the future fate of populations or entire species.

*This is where all of you come into play!*

By collaborating with both the public and other experts in the Australian wet tropics bioregion (AWT), it is our hope to classify as many species’ interactions for this region as possible. More specifically, it is our goal to collect data on any species of animal that predominantly or permanently lives on land in the AWT bioregion. An example of an interaction could be between a spider catching a fly in its web (a type of predator-prey interaction), a tick gorging itself on a reptile (a type of parasite-host interaction), or even a bee pollinating a flower (a type of plant-pollinator interaction). Evidence of an interaction can either be anecdotal, or through a verifiable form of media (e.g., photos, videos, etc.).

Submissions towards this database can be made using three different methods:

* **Method 1.** Submissions can be made through the online citizen science platform ‘iNaturalist’ – Check out a link to my project here [here](https://www.inaturalist.org/projects/pci-project).
* **Method 2.** Submissions can be made through an online survey. If you would like a link to this survey, please email me at [seamus.doherty@flinders.edu.au](mailto:seamus.doherty@flinders.edu.au) for further details.
* **Method 3.** Alternatively, you can also directly email me individual submissions using seamus.doherty@flinders.edu.au. If you pick this method, please make sure to include the names of the species interacting (common or scientific name), the type of species interaction (e.g., predator-prey, etc.), as well as a location (e.g., subregion, town, or park name, etc.), and any evidence of the interaction (e.g., photo, video, etc.) if possible.

To find out more information, please contact Seamus Doherty, Flinders University, [seamus.doherty@flinders.edu.au](mailto:seamus.doherty@flinders.edu.au), 0439 612 221.

**Photo caption:**

**(see attached in email)**

A predator-prey interaction between a Lace Monitor (*Varanus varius*) and a Spotted Phyton (*Antaresia maculosa*), Jourama Falls, Yuruga, QLD. Photo taken by Jaakko Iivonen (CC BY-NC) (2020).