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## **Rabbits killing birds: Hypopredation and limitations of hyperpredation**

Biological invasions often damage island ecosystems. One such damaging consequence of biological invasions is hyperpredation. Hyperpredation is the increase in predation pressure from a generalist predator following the introduction of an alternative prey, typically a consequence of apparent competition between the two prey. Models for this have been devised that demonstrate this effect. However, hyperpredation may not always occur or may not always occur at the same strength.

In this talk, we will investigate how saturation in the predator's functional response effects the strength of hyperpredation. We will demonstrate that predator saturation can actually overturn hyperpredation into hypopredation, an increase in native prey, as a result of *apparent predation* between the two prey. This occurs when the alternative prey is 'poisoned prey', i.e. prey that have a handling time cost greater than the nutritional benefit for the predator. Consuming 'poisoned prey' can result in an increase or decrease in predator density. From this, we conclude that the invasion of established ecosystems by non-native prey can lead to more diverse consequences than previously thought.