



YCCSA Seminar Series Autumn 2015

Playing possum: modelling brushtail possum impacts in New Zealand

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Abstract:

Invasive mammals such as possums, rodents and deer are widely controlled across New Zealand to conserve native biodiversity and limit disease spread. However, the way in which control is implemented can be highly controversial, and many of the issues can only be resolved by discussion among multiple stakeholders with conflicting values. Good communication of scientific research is therefore vital to ensure that stakeholders are well-educated about the cause, effect and economics of the available management strategies.

In this talk, I will introduce a range of models of flora and fauna interactions, dynamics, monitoring and management in order to describe the impact of brushtail possums (*Trichosurus vulpecula*) on native forests in New Zealand. I will then show how these models have been integrated to create a virtual world in which to test possum management strategies, and embedded within a computer game to provide a novel medium by which to engage non-scientists and/or non-specialists with the underlying science. Finally, I will present results from preliminary user tests indicating that *Ora - Save the Forest!* is an effective way to help players learn about forest management, and provide an opportunity for the audience to play a development version of *Ora*.