



Ecology and population genetics of two large macaws in the Peruvian Amazon

Thursday, 19 November 1-2pm

Speaker

George Olah

Location

Fenner Seminar Room

Fenner Building #141
Linnaeus Way, ANU

This lecture is free
and open to the public



The order Psittaciformes (parrots) contains 398 extant species of which 28% are classified as threatened on the IUCN Red List. This thesis presents a wide array of interdisciplinary methods to study parrots: statistical modeling of their extinction risk, on site ecological studies of nest preferences, and population genetic techniques.

I modeled the factors associated with extinction risk in parrots, including intrinsic biological, life history and ecological attributes, external anthropogenic threats, and socio-economic variables. Most parrots are limited in their breeding success by

the availability and quality of nest hollows, so I evaluated how nesting opportunities for macaws can be increased by provision of artificial nest boxes. I also developed species-specific microsatellite (STR) genetic markers for scarlet macaw and validated their potential for genetic tagging of two sympatric macaw species in the Peruvian Amazon. Landscape genetics provided an extra framework to study the macaw populations, revealing the landscape factors contributed to their genetic structure.

About the speaker: George Olah graduated in Zoology M.Sc. at the University of Veterinary Sciences in Budapest, Hungary in 2006. Since, he has participated in several research projects on parrots and macaws in Argentina, Mexico, Bolivia and Peru. From 2008 he worked for the Tambopata Macaw Project in southeastern Peru to gain a better understanding of the natural history of macaws in lowland Amazonian rainforest. Realizing that the human impacts on the habitat of these species were accelerating, he decided to undertake a PhD in conservation biology at ANU. His previous experience and interest in genetic analyses and his endeavour to preserve biological diversity via well established conservation management found their common niche in conservation genetics. George also works with a local eco-tourism company in Peru to promote research, to impulse science communication, and to engage native communities in local conservation issues.

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