

Honours Project

Title: 'Conserving migratory raptors in East Asia'



Analyse the state of knowledge and international policy framework for conserving migratory raptors in East Asia.

Rationale: Raptors, also known as birds of prey (Acciptriformes, Falconiformes, Strigiformes), are a key component of biodiversity, they modulate top-down trophic processes, provide ecosystem services, and are bioindicators of environmental changes that can ultimately harm humans too. These species are vulnerable to anthropogenic stressors, given their intrinsic low densities, breeding biology, and high trophic level. Unsurprisingly, a recent global analysis indicated that about 20% of species are threatened and 50% have declining populations as a result of habitat loss and human induced mortality.

Within this taxon, many species undertake long-distance migrations spanning multiple countries, which warrants international conservation efforts of coordination and cooperation. An example of this imperative is the Memorandum of Understanding on the Conservation of Migratory Birds of Prey in Africa and Eurasia, an international agreement developed under the Convention on Migratory Species. Most conservation related research on raptors has, however, focused on demography, migration ecology, threats, and management interventions. So far, the international policy dimensions of their conservation have not been the subject of studies focusing on it empirically in its own right. Addressing this knowledge gap can open an important avenue of enquiry to strengthen current efforts for their conservation at an international level.

The project: There are five broad migratory raptor flyways, as follows: the Trans-American Flyway, the Western European-West African Flyway, the Eurasian-East African Flyway, the East-Asian Continental Flyway, and the East-Asian Oceanic Flyway. Amongst all, the last two deserve special attention as they present the highest species richness, the highest proportion of threatened species, and the least studied species. Hence, this project will consider the following questions: (i) what species migrate in these flyways?; (ii) are their migratory strategies well known spatially and temporally?; (iii) what are their threats?; (iv) are their populations monitored?; and, (v) are there international efforts for conserving them, including research?

Methods: primarily desktop approaches with a focus on spatial patterns and network analysis.

Duration: 8 months to 1 year.

Candidates: potential honours or master's research project with prospects to subsequently develop a PhD project.

Supervisors:

Professor Richard A. Fuller
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To apply or for more information, please email r.fuller@uq.edu.au or e.gallocajiao@uq.edu.au