

FRIDAYS AT 16:00 IN 3N01 – ALL ARE WELCOME!

ECOLOGY & BIODIVERSITY SEMINAR SERIES



Prof. Tim Bonebrake

Timothy C. Bonebrake is a Professor and Director of the School of Biological Sciences at HKU. Born and raised in California, he has a B.S. from UC Berkeley and a PhD from Stanford. He leads the Global Change and Tropical Conservation lab and Ptim and the Ptarmigans

Date: Fri., Sept. 26th, 2025

Time: 16:00

Venue: CPD-2.19 (at Centennial campus)

Social: 17:30 @ Central Ferry Piers (between piers 3 & 4)

Advancing beyond Janzen's mountain pass hypothesis to understand climate change impacts

Janzen's mountain pass hypothesis laid out the simple but brilliant observation that tropical species should have narrower elevational distributions as a consequence of lower annual variation in temperature in the tropics. Decades later Janzen's hypothesis was recognized by eco-physiologists who used it to project adverse impacts of global warming on tropical biodiversity.

In this talk I'll cover the development of Janzen's hypothesis with respect to tropical climate change impacts. Using recent studies from my lab I'll detail why my personal view is that Janzen's hypothesis has limited power in explaining variation in vulnerability across latitude. While there is evidence of narrower thermal niches in the tropics for many taxa (but not all), thermal tolerance is also heavily influenced by habitat, behavior, and developmental conditions. While Janzen's hypothesis continues to have utility in global change research, the generation and exploration of new hypotheses will yield novel insights into tropical biodiversity.