



EVENET – An eco-evolutionary network of biotic interactions

Eco-evolutionary dynamics in an urbanised world

Special symposium @ Ecology Across Borders; the Joint Annual Meeting of the British Ecological Society (BES), the Gesellschaft für Ökologie (GfÖ) and NecoV, in association with the European Ecological Federation (EEF).

ICC Ghent, Thursday 14th December 2017, 12.30-14.30

Urbanization is a prime example of a human-induced environmental change that imposes strong selection pressures on a wide variety of species, and that is predicted to dramatically increase in effect in the coming decades. Many studies have reported pronounced changes in species composition and associated trait values in response to urbanization, and an increasing number of studies have reported genetic adaptation to urban settings in natural populations of plant, animal, fungi, and microbial organisms. Urban areas are expected to be the theatre of intense eco-evolutionary dynamics given the strong interplay between both evolutionary and ecological responses to human-induced environmental change. The first studies supporting this expectation are being published, revealing a worldwide 'urban signature' of phenotypic change in many populations. This session is intended to bring researchers together that focus on ecological and evolutionary responses to urbanization and their interactions, to highlight recent findings on eco-evolutionary feedbacks in response to urbanization, and stimulate discussions on the implications of these findings and on the way forward in building towards a comprehensive understanding of the impact of urbanization on local and regional diversity, trait distributions and ecosystem functioning.

Speakers:

Pierre-Oliver Cheptou (CNRS Montpellier, F) - Plant adaptation to urban environments

Marina Alberti (Washington University - US) – Eco-evolutionary dynamics in an urbanising planet

Thomas Merckx (Univ. Louvan-La-Neuve, B) – Body Size shifts in urban communities

Maxime Dahirel (Univ. Rennes, F) – Body size constraints and behavioural adaptations to city life: a case study in the spider *Araneus diadematus*

Nedim Tüzün (KU Leuven, B) – Sexual selection reinforces a higher flight endurance in urban damselflies

Lynn Govaert (KU Leuven, B) – Eco-evolutionary dynamics in urbanised landscapes: evolution, species sorting and the change in zooplankton body size along urbanisation gradients

Kristien Brans (KU Leuven, B) – Rapid thermal evolution driven by urbanisation shapes predator-prey dynamics