# Urbanization effects on life history traits in the damselfly Ischnura elegans

## Gemma Palomar<sup>1,2</sup>, Guillaume Wos<sup>1</sup>, Robby Stoks<sup>3</sup>, Szymon Sniegula<sup>1</sup>

<sup>1</sup>Institute of Nature Conservation Polish Academy of Sciences, Kraków, Poland
<sup>2</sup>Department of Genetics, Physiology, and Microbiology, Complutense University of Madrid, Spain
<sup>3</sup>Laboratory of Aquatic Ecology, Evolution and Conservation, University of Leuven, Belgium

### Problem

- Urbanisation, warming and invasive alien species pose threats to local biodiversity
- Seasonal time constraints can mediate the effects of these anthropogenic stressors
- Few studies on interactions between anthropogenic stressors included seasonal time constraints

#### Conclusions

- Urbanisation affects fitness traits
- Exotic predators negatively affect natives' fitness traits, yet, independently from urbanization effects
- The accumulation of stressors can have complex effects on damselflies' fitness traits

#### Funding

ECOPOND UMO-2019/34/H/NZ8/00683 funded from the Norway grants under Norwegian Financial Mechanism 2014 with the Basic Research Programme operated by the National Science Centre in Poland









