

ABSTRACTS ORAL PRESENTATIONS

Keynote lecture

Invasion pathways, species invasion success and habitat invasibility in Europe

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Biological invasions are not only regarded a problem throughout Europe by ecologists, but also policymakers recognized the importance of this topic. Consequently, the European Commission funded some large projects to analyse the problem. Two of them are the Integrated Project ALARM (Assessing Large scale environmental Risks for biodiversity with tested Methods; www.alarmproject.net) and the Specific Targeted Research Project DAISIE (Delivering Alien Invasive Species Inventories for Europe, www.europe-aliens.org). I will briefly summarize the main findings of these projects, attempting to answer the following questions: How did alien species get into Europe? What makes species successful invaders? Which habitats are especially invaded in Europe?

Existing pathways of introduction of alien species were reviewed and a new classification system was elaborated which is also related to appropriate management responses and regulative bodies. The first distinction is whether alien species arrive with or as commodities, with specific vectors or by autonomous dispersal.

Analysing invasion success has quite some history and still no common conclusions can be drawn, except that species being invasive in one region are likely to become invasive in other regions. Nevertheless, recognizing multi-trait models and trait interactions can facilitate the quest for specific species characteristics.

Lastly, based on the analyses of small-scale vegetation plots, we were able to provide an overview of the most invaded habitats through Europe and draw a map of the most invaded regions. Adding scenarios of possible future changes in land use, we were able to project species invasions into the future under these scenarios.