

EDGG

Talk Grasslands

Winter 2020-2021 Program

- **Drivers of insect decline in grasslands: mechanisms and solutions** by Nadja Simons, 08 December 2020 Tuesday 14.00 (CET)
- **Recent developments of the EUNIS classification of European habitats** by Milan Chytrý, 12 January 2021 Tuesday 14:00 (CET)
- **Grasslands: ancient and modern** by Honor C Prentice, 04 February 2021 Thursday 14.00 (CET)

The meetings will be online in Zoom platform (Zoom link: 933 5958 0562 Password: 112233). Talks will have a duration of 45 mins followed by Q&A session. Visit EDGG's Talks page <https://edgg.org/talks> to find links to videos after the talks. Please see below more information about the speakers and their talks. Please contact with organisers if you have any questions: Didem Ambarlı (didem.ambarli@gmail.com), Alla Aleksanyan (alla.alexanyan@gmail.com) and Stephen Venn (Stephen.Venn@Helsinki.Fi).

Drivers of insect decline in grasslands: mechanisms and solutions

By Nadja Simons

08 December 2020 Tue 14.00 (CET)

Insects are the most diverse animal group on the planet, can be found in all ecosystems, and play a major role in almost all ecosystem process. Despite their importance for healthy ecosystems and many ecosystem services, their numbers and diversity is declining rapidly and to worrying extend. This talk will take a closer look at the insect (and spider) communities on managed grasslands in Germany. It will highlight the current trend of insect diversity, discuss the effect of management type and intensity on insect diversity as well as the underlying mechanisms, and provide insights into possible solutions for biodiversity-friendly grassland management.



Nadja Simons is a brilliant young researcher working on the interactions between land use, biodiversity and ecosystem functioning. Her special focus is arthropods. She is interested in how management decisions affect the functional diversity of arthropod communities at different spatial and temporal scales and how those translate to changes in the provisioning of ecosystem functions. Her work contributes to the development of grassland management that minimises conflicts between production and conservation both on individual grasslands and at the landscape scale. Since December 2018 she is a postdoctoral researcher at Ecological Networks Lab of the Technical University of Darmstadt. More information can be found on her webpage: <https://www.econetlab.net/nadja-simons>

Recent developments of the EUNIS classification of European habitats

By Milan Chytrý

12 January 2021 Tuesday 14:00 (CET)

The EUNIS Habitat Classification, managed by the European Environment Agency, is a widely used reference framework for natural, semi-natural and man-made habitat types in Europe. Recently, this classification was extensively revised and updated. One of the main problems of the earlier EUNIS versions was the lack of clear definitions of individual habitat types that would enable a reliable assignment of each site to a habitat type. Therefore, an expert group from the IAVS Working Group European Vegetation Survey including Milan Chytrý has been working since 2012 for the European Environment Agency on improvements of EUNIS. The experts proposed more meaningful concepts of many habitat types, developed their unequivocal definitions and delivered characteristics of individual habitat types based on reliable data. They developed the expert system called EUNIS-ESy for automatic classification of European vegetation plots to EUNIS habitats. They used this expert system to classify approximately 1.3 million vegetation plots from the European Vegetation Archive. Then they used these plots to produce statistically derived characteristic species combinations and distribution maps for more than 200 EUNIS habitat types. In this presentation, Milan will summarise the main features of the revised EUNIS classification and demonstrate how to use the EUNIS-ESy expert system. See also <https://vegsciblog.org/2020/08/21/filling-empty-boxes-european-habitat-classification-eunis/>



Milan Chytrý is one of the leading plant community ecologists of Europe. He is interested in vegetation survey and classification, vegetation-plot databases, broad-scale patterns of plant species diversity, palaeoecology, plant invasions and habitat conservation. His work spans across Palearctic region. He is a chief editor of the Journal of Vegetation Science and Applied Vegetation Science, a Secretary of the IAVS Working Group European Vegetation Survey, and a coordinator of the European Vegetation Archive. More information can be found on his webpage: <https://www.sci.muni.cz/botany/chytry/>

Grasslands: ancient and modern

By Honor C Prentice

04 February 2021 Thursday 14.00 (CET)

Much of Honor's research on grassland ecology and plant population genetics is carried out on the Baltic island of Öland. She is interested in the mechanisms that shape and maintain patterns of variation and levels of biodiversity – both within species and within plant communities, and on different spatial scales. One thread of her ongoing research includes genetic and genomic studies of fine-scale local adaptation in *Festuca ovina*. Another thread has a focus on processes of community assembly and on species' habitat-preferences within long-term arable-to-pasture successions. Honor is passionate about the wonderful complexity of grassland communities and about the need to conserve grassland ecosystems. More information can be found at [https://portal.research.lu.se/portal/en/persons/honor-c-prentice\(610306d8-3fb1-4409-8c66-937c9dea5378\).html#Overview](https://portal.research.lu.se/portal/en/persons/honor-c-prentice(610306d8-3fb1-4409-8c66-937c9dea5378).html#Overview)



In her talk, Honor will show different ways in which plant community composition can be used as a tool to investigate ecological and population-genetics questions. She will give examples from the grasslands and "alvar" heaths on the Great Alvar of Öland where her team characterised the ages of the grassland fragments (using historical maps, aerial photos and satellite scenes) and explored different aspects of plant community assembly as well as the historical and edaphic factors that are associated with the occurrence of individual species.