Program of conference Ekologie 2022

Dear Colleagues,

On behalf of the hosting Czech Society for Ecology and the Faculty of Forestry and Wood Technology of Mendel University in Brno, we look forward to welcoming you all in Brno, Czech Republic on 7-9 September 2022 for the 8th Ekologie conference, a friendly event organized by the Czech Society for Ecology.

This ecology conference is being held at the Mendel University in Brno for the first time. Several research groups focused on ecology have recently formed at Mendel University. However, investigating ecological concepts and principles in the context of forestry research and science has a long history. Brno has been known as one of the most popular Czech university cities and its reputation as a student city is well known. The British company Quacquarelli Symonds, which publishes a regular ranking of the best universities and evaluates university cities based on student references, declared Brno the sixth best student city in the world in 2021.

We are confident that Ekologie 2022 will have a high scientific impact and become a memorable experience to all participants from central Europe. The themes of the conference cover ecology *sensu lato* so they cover the entire field of ecology as well as its applications, including nature conservation. We received a wealth of diverse and high quality submissions and thus believe this will be an exciting and beneficial event for all participants. The COVID-19 pandemic interrupted the regular holding of the conference, but now you have the opportunity to meet in person again and discuss various topics and important projects. We believe that this Ekologie 2022 will be a memorable event and look forward to seeing you there!

Ondřej Košulič & Šárka Mašová
Main organisers



Detailed conference program (**Student contributions*)

Wednesday 7. 9. 2022

From 11:00	Registration	
12:00-12:10	Opening	
12:10-14:00	1st session	Measuring biodiversity across large scales
12:10	Keynote talk: Ondřej Mottl	Quantifying rates of vegetation change of the last 18,000 years
12:35	Irena Šímová	The dynamics of the productivity-diversity relationship during the last 21,000 years
12:47	Jan Smyčka	Do the species with large geographic ranges diversify faster?
12:59	Anna Tószögyová	Serious mathematical biases in the calculation of the Living Planet Index
13:11	Antonin Machac	The dynamics of bird diversity across regions and elevations of the New World
13:23	David Hořák	A hazy barrier? Exchange of avifaunas along elevation of Mt. Cameroon
13:35	Alena Sucháčková	Czech Republic as a crossroad: biogeographic application of the Czech butterfly barcoding
13:47	Jakub Žárský	The Cryogenian Cradle of Land Plants
14:00-14:25	Coffee break	
14:25-15:50	2nd session	Forest ecology and management in the changing world
14:25	Keynote talk: Lucie Vítková	Ecological forestry and the willingness of foresters to adopt new management principles
14:50	Radim Matula	Varying effects of tree composition and diversity on microclimate of European forests
15:02	Eva Chumanová	Invasive pathogens of woody plants in the Czech Republic: identification, impact and management
15:14	Ondřej Košulič	Impact of ash dieback on multi-trophic biodiversity in a hardwood floodplain forest
15:26	*Soham Basu	Resistance and Resilience of South Moravian floodplain forest in increasing drought events
15:38	*Tomáš Hamřík	The optimal frequency of canopy thinning to maintain spider diversity in open oak-dominated woodlands
15:50-16:20	Coffee break	
16:20-18:00	3rd session	Vojtěch Jarošík's Award (winners, talks of awardees)
16:20	Eliška Bohdalková	Universality in biodiversity patterns: variation in species–temperature and species–productivity relationships…
16:32	Samuel Dijoux	Community structure and collapses in multichannel food webs
16:44	Lenka Harmáčková	Foraging specialization and niche overlap in Australian songbirds
16:56	Peter Mikula	Global variation in song frequency of passerines is best explained by changes in their body size
17:08	Anna Šolcová	Abrupt vegetation and environmental change since the MIS 2: A unique paleorecord from Slovakia
17:20	Jiri Tuma	Ant-termite interactions: an important but under-explored ecological linkage
17:32	Jakub Žák	Reproductive senescence in a short-lived fish
17:44	Michael Mikát	Polyandrous bee provides extended offspring care biparentally as an alternative to monandry based eusociality
18:00-19:00	Plenary talk	
	Jörg Müller	Between chainsaws and bark beetles: lessons learned for biodiversity management in forests
20:00	Social evening in the Pegas Alehaus	

Thursday 8. 9. 2022

9:00-10:25	**4th session**	**Spatio-temporal patterns in ecology I.**
09:00	**Keynote talk: Kateřina Kopalová**	Diatoms as model organism for studying ecology and biogeography in Antarctica
09:25	Vojtěch Kubelka	Animal migration to northern latitudes: still advantageous strategy or maladaptive behaviour?
09:37	Jules Segrestin	Drivers of the spatial stabilization of a grassland metacommunity
09:49	Petr Pokorný	The case of the „Moravian Yellowstone“: Cryptic northern refugia decrypted?
10:01	Tomáš Telenský	Novel model reveals important patterns in population dynamics of long-distance migratory birds
10:13	Vladimír Remeš	The evolution of secondary syntopy in honeyeaters: insights from unbiased co-occurrence analyses
10:25-10:45	**Coffee break**	
10:45-12:00	**5th session**	**Spatio-temporal patterns in ecology II.**
10:45	*Donam Tushabe	Correlates of pollen thermotolerance
10:57	*Ernesto Bonadies	Population trends of tropical insect pollinators after 10-years of monitoring on Barro Colorado Island, Panama
11:09	Štěpán Janeček	Spatiotemporal pattern of specialization of sunbird-plant networks on Mt. Cameroon
11:21	*Marie Smyčková	Lighter and less structured primary forests host more herb species
11:33	Jaroslav Vojta	Large-scale distribution of open-canopy forests reflects historical settlement pattern
11:45	Tomáš Herben	Long-term fluctuations of plant populations: are there any clues about their mechanisms
12:00-13:00	**Lunch**	
13:00-15:00	**Poster session (with coffee and refreshments)**	
15:00-16:15	**6th session**	**Trophic and mutualistic interactions I.**
15:00	**Keynote talk: Jan Hrček**	Bridging field and laboratory ecology: impact of warming on *Drosophila* -parasitoid networks
15:25	*Michaela Mojžišová	Reservoirs of the crayfish plague pathogen and its diversity in Czechia and Central Europe
15:37	*Anna Mrázová	Interactions between plants, herbivorous insects and predators: mechanisms and ecological importance
15:49	David Boukal	Global change and species invasions in simple communities: a modelling study
16:01	*Warbota Khum	Effects of local and landscape factors on spider-insect prey food webs in mango orchards
16:15-16:25	**Coffee break**	
16:25-18:05	**7th session**	**Trophic and mutualistic interactions II.**
16:25	Katerina Sam	The impact of ants and vertebrate predators on arthropods and plants: a meta-analysis and a case study
16:37	*Tereza Novotná Jaroměřská	Enigmatic consumers on glaciers: uncovering carbon and nitrogen stable isotopes of tardigrades and rotifers…
16:49	Eva Kaštovská	Plant–microbial–soil interactions as drivers of ecosystem C and N cycling
17:01	*Sophie Mennicken	Orchid-mycorrhizal fungi networks are more specialized in Mediterranean than in Central Europe
17:13	Aditi Pandit	Natural existing arbuscular mycorrhizal-bacterial biofilm associations and their functional behavior
17:25	Caio Cesar Pires de Paula	Inside the leaf microbiome: how to quantify the extent of foliar endophyte colonization?
17:37	Robert Tropek	Elevational patterns of specialisation in pollination networks in rainforests of Mount Cameroon
17:49	*Sailee Sakhalkar	Nectar robbing and thieving in Afrotropical rainforests: quantification, patterns and drivers
18:15-19:45	**General Assembly of the Society – Valné shromáždění ČSPE (in Czech)**	
20:00	**Banquet**	

Friday 9. 9. 2022

9:00-10:25	**8th session**	**Biodiversity conservation**
09:00	**Keynote talk**: **Martin Jiroušek**	Fallows as a tool for biodiversity conservation and restoration
09:25	Tomáš Václavík	The impact of agri-environmental measures on habitat suitability of farmland birds
09:37	Vojtěch Kolář	Do we know how to protect the littoral zones of fishponds?
09:49	Jan Lepš	Resistance and resilience: it is much easier to destroy species rich meadow than to restore it
10:01	Michal Choma	Recovery of ectomycorrhizal fungi community after forest dieback along vegetation regeneration
10:13	Ricarda Pätsch	Niches of Pannonian halophytes differ by salt types
10:25-10:45	**Coffee break**	
10:45-12:10	**9th session**	**Animals of prey: from herbivory to predators**
10:45	Martin Volf	Differential macroevolution of chemical diversity in lowland and highland willow species
10:57	*Priscila Mezzomo	Can herbivore traits predict the specificity of induced plant responses?
11:09	*Klára Pyšková	Browsing pressure and shrub species richness in different habitats of the Kruger National Park
11:21	Jan Čuda	Habitat and bedrock modify plant-herbivore relationships in a South-African savanna
11:33	Miroslav Kutal	No evidence that wolf hunting reduces livestock damages in Slovakia
11:45	Martin Duľa	The first insight into feeding and hunting behaviour of Carpathian lynx
11:57	Jan Klečka	The role of among-individual differences in behaviour for predation by spiders
12:10	**Announcement of the best student presentations, Closing ceremony**	

12:30-13:30 **Lunch**

List of posters (**Student contributions*)

1* Tiba Jassam Kaison AL-IMARI Functional analyses of benthic diatoms in brownish forest lakes, Hungary
2* Dominik ANÝŽ Do selfing rates rise with elevation as pollinator activity decreases in Afromontane grasslands?
3* Michal BARTÁK Role of moths in nocturnal pollination of flowering plants in tropical ecosystems
4 Tomas BARTONICKA Animals on the road: a new book about the human-widlife conflict on roads
5* Martina BERNATOVÁ Multiple predator effect of arthropod and vertebrate predators on vitality of pear trees
6* Eva BÍLKOVÁ The effect of environmental variables on the development and survival of Sympetrum striolatum larvae
7 Martin BITOMSKÝ Modes of evolution of tissue element stoichiometry in co-occurring grassland herbs
8* Pavel Karel BYSTŘICKÝ Common amphipods Gammarus fossarum in eastern Czechia are several frequently co-occurring species
9* Tereza CAHOVÁ Soil diatom communities of Ile Amsterdam, South Indian Ocean
10* Kateřina CZAJOVÁ Effect of plant secondary metabolites on the caterpillar gut microbiota of monophages and polyphages
11 Sylvain DELABYE Elevational and seasonal intraspecific differences in tropical moths' sizes on Mount Cameroon
12* Michaela DRGOVÁ Estimates of true arthropod density in bryophytes
13* Daniel DUSÍK Microannelids of oak-dominated coppices of the Podyjí National Park, Czechia
14* Sara FERNANDEZ GARZON Trophic plasticity in Australian ants: A stable isotopes approach
15* Jan FILIP Latitudinal patterns in specialisation of plant-pollinator interactions
16* Fernando GAONA Habitat specialization of butterflies and moths along an elevational gradient on Mount Cameroon
17* Andrea GARGULÁKOVÁ Catch them all! Became a science data hunter with our species identification mobile applications.
18 Petra HÁJKOVÁ Holocene history plays an important role in forest-steppe formation
19* Jan HÄUSLER Rake in the forest
20 Martin HEJDA Plant diversity of a South African savanna is determined by local rather than large-scale factors
21 Eva HEJDUKOVÁ Biological soil crust microalgae manipulation experiments in the High Arctic
22 Jan HOLÍK Neighbourhood effects on woody plant selection and bark stripping by deer
23* Markéta HOUSKA TAHADLOVÁ Which natural enemy is important in temperate forest understory? May tree life strategy be the key?
24* Marie HOVORKOVÁ Ant succession in post-mining sites: comparison of temporal changes with space for time substitution
25* Kristína HRIVNÁKOVÁ Variability of the alpine lake Prostredné Spišské pleso (High Tatras) due to climatic factors
26* Terezie CHAMRÁTHOVÁ Can hemiparasitic Melampyrum arvense serve to control the spread of invasive Erigeron annuus?
27* Constantinos CHARALAMBOUS The temporal variability in the shape of the density-occupancy relationship in waterbirds
28* Panayiotis CHRYSANTHOU Unraveling the age structure of old-growth oak coppice woodlands in Eastern Mediterranean
29 Milan CHYTRÝ Pladias.CZ and FloraVeg.EU – online ecological databases of Czech and European flora and vegetation
30 Jitka JANČÚCHOVÁ LÁSKOVÁ Nonlethal effect: Mere predator presence affects behavior, stress hormones and arthropod assemblages
31* Anni JAŠKOVÁ Acknowledging boreal rich-fen forests in the EUNIS habitat classification
32 Veronika KALUSOVÁ Overview of European alien plant checklists
33 Josef KAŠÁK Shortage of declining and sun-exposed trees in forests limits longhorn beetle Ropalopus ungaricus
34 Jitka KLIMESOVA Mind the roots and rhizomes!
35* Ishmeal Nubitgha KOBE Nocturnal pollination in tropical rainforests of Mount Cameroon
36* Monika KOLÉNYOVÁ Does deadwood origin matter? The way a tree dies affects the wood-inhabiting fungal community development
37 Marie KOTASOVÁ ADÁMKOVÁ Cattle grazing and mowing: an opportunity for ecological restoration of meadow wetlands
38* Přemysl KRÁL Facilitation or competition? Microtopography affects interspecific interactions in vegetation of alder carrs
39* Jing LEONG Evolution of chemical defenses in Salicaceae and the plant-herbivore arms race
40 Olga LEPŠOVÁ-SKÁCELOVÁ Rescue of critically endangered Potamogeton praelongus Wulfen: problems after restoration of a river oxbow
41* Martin MARTINKA The power line clearing as a barrier for soil invertebrates
42* Marek MEJSTŘÍK The effects of stand density, standards and species composition on biomass production in coppices
43 Radek MICHALKO Landscape and local factors affect incorporation of agrochemicals in local food webs
44* Jan OULEHLA Can construction of pools in wetlands be the cause of habitat degradation and negative changes of vegetation?
45 Jan PERGL Spread of alien plants along the Trans-Siberian railway: the effect of biogeographical zones
46 Michal PLÁTEK LIFE for Insects. Conservation of Selected Natura 2000 Insect Species of Western Carpathian Mts.
47* Jindřich PRACH Broadleaf or coniferous? Landscape scale vegetation reconstruction from fossil pollen, Třeboňsko
48* Martin PRACH The past and the present of European larch in Central Europe
49* Veronika PRIELOŽNÁ Community Ecology Parameter Calculator in R
50 Jiří PROCHÁZKA Impact of the glaze ice on saproxylic beetles in Podyjí National Park 5 years after the disturbance.
51 Petr PYŠEK Alien plants of the Czech Republic: checklist update, introduction dynamics and impact assessment
52* Grace RIDDER Possibilities and limitations of hierarchical modeling of species communities with large datasets
53* Petra RYCHLÁ HULEJOVÁ Impact of conservation thinning in oak woodlands of NNM Kukle on epigeic spiders (Araneae)
54 Zuzana SEJFOVÁ Changes in occurrence and abundance of alien plant species over eight years along the Labe river
55 Jiří SCHLAGHAMERSKÝ Does snowmaking affect soil and epigeic fauna on ski runs in the Giant Mountains (Krkonoše, Czechia)?
56* Antigoni SOUNAPOGLOU Plant-pollinator interactions along an elevational gradient in forests of the Krkonoše Mts.
57 Jan ŠEBESTA Long-term change in understorey of non-managed temperate deciduous forest: indirect effect of forest management
58 Tamara TĚŠITELOVÁ Hemiparasitic plants vs. invasive Asteraceae: effects of species identity and genotype selection.
59* Martin VAŠÍČEK Influence of management practices on arthropod communities in dry species-rich grasslands in the Western Carpathians
60 Ivana VAŠÍČKOVÁ Drivers of wind mortality associated with severe windstorms in primeval mountain forest
61* Pavla VYMAZALOVÁ Impact of active conservation management on spiders and carabid beetles in a protected oak forest
62 Matthias WEISS Bark and ambrosia beetles on native and transplanted dead wood along an altitudinal tropical forest gradient
63* Barbora WINTEROVÁ Marine Protected Areas of Sri Lanka: Strengths, Shortcomings and Suggestions for Improvement

PROGRAM AT A GLANCE

Wednesday 7. 9. 2022	
since 11:00	Registration
12:00-12:10	Opening
	Measuring biodiversity across large scales
	Keynote talk: Ondřej Mottl
12:00-13:59	Šímová, Smyčka, Tószögyová Machac, Hořák, Sucháčková, Žárský
14:00-14:25	Coffee break
	Forest ecology and management in the changing world
	Keynote talk: Lucie Vítková
14:25-15:50	Matula, Chumanová, Košulič, Basu, Hamřík
15:50-16:20	Coffee break
	Vojtěch Jarošík's Award
	Chairman: Adam Petrusek
16:20-18:00	Bohdalková, Dijoux, Harmáčková, Mikula, Šolcová, Tuma, Žák, Mikát
18:00-19:00	***Plenary talk*** **Jörg Müller**
since 20:00	Social evening in the Pegas Alehaus

Thursday 8. 9. 2022	
	Spatio-temporal patterns in ecology I.
	Keynote talk: Kateřina Kopalová
9:00-10:25	Kubelka, Segrestin, Pokorný, Telenský, Remeš
10:25-10:45	Coffee break
	Spatio-temporal patterns in ecology II.
10:45-12:00	Tushabe, Bonadies, Janeček, Smyčková, Vojta, Herben
12:00-13:00	Lunch
13:00-15:00	***Poster session*** (with refreshments)
	Trophic and mutualistic interactions I.
	Keynote talk: Jan Hrček
15:00-16:15	Mojžišová, Mrázová, Boukal, Khum
16:15-16:25	Coffee break
	Trophic and mutualistic interactions II.
16:25-18:05	Sam, Novotná Jaroměřská, Kaštovská, Mennicken, Pandit, Pires de Paula, Tropek, Sakhalkar
18:15-19:45	**General Assembly of the Society** Valné shromáždění ČSPE (in Czech)
20:00	***Banquet***

Friday 9. 9. 2022	
	Biodiversity conservation
9:00-10:25	**Keynote talk: Martin Jiroušek** Václavík, Kolář, Lepš, Choma, Pätsch
10:25-10:45	Coffee break
	Animals of prey: from herbivory to predators
10:45-12:10	Volf, Mezzomo, Pyšková, Čuda, Kutal, Duľa, Klečka
12:10-12:30	**Announcement of the best student presentations, Closing ceremony**
12:30-13:30	Lunch

scientific program in English
bilingual scientific program
organisation events
social program
breaks

Important information

Eduroam or

wifi: mendelu-host
login: ekologie
password: mndl2022

Lunches paid separately

Building O (canteen) or outside restaurants

Coffee breaks will be served in the atrium of building Q, just outside the lecture hall Q01.

Social evening in the Pegas Alehaus (7. 9. 2022 since 20:00)

GPS: 49.1961942N, 16.6071083E

Jakubská 120/4
Brno, 602 00

https://brnorestauracepivnice.hotelpegas.com/

By Tram 9 to station Česká (It takes 9 minutes from station Zemědělská)
By foot from Česká to Jakubská 120/4 – 250 m = 3 min

Banquet (8. 9. 2022 since 20:00)

Building X (opossite to building Q where the conference is held)

