

# Scientific Programme

## 50<sup>th</sup> GfÖ Conference

Monday 30 August 2021					
08:00	Log-in of participants and tech-check				
<b>Plenum</b>					
08:15	Opening + Moderation				
08:45	1. Award Keynote Bernhard Schmid (30 min + 10 min discussion)				
09:25	Moderation				
09:30	Meet the Speaker (Digitale Debate Lounge)				
09:45	Break				
09:50	Track 1	Track 2	Track 3	Track 4	Track 5
	Session 1	Session 2	Session 3	Session 4	Session 5
	Lessons from 50 Years of Ecology	Agrobiodiversity and Ecosystem Services	Biodiversity Monitoring	Carbon Allocation in Plants and Ecosystems	Nature and People
	C. Ammer, A.-M. Klein	C. Westphal, A. Hass, M. Felipe-Lucia, M. Kernecker	D. Ott, C. Scherber, H. Reininghaus, M. Meyer, V. Zizka	H. Hartmann, G. Hoch, M. Bahn	R.R.Y. Oh, A. Bonn, M.R. Marseille
09:50	Moderation		Moderation		Moderation
09:55	Moderation	<b>02-O-01 G. Peer:</b> The science, the policy and reality: where are the win-wins for farmers and the environment, and what will the next CAP do to support them?	<b>03-O-01 L. Weiss:</b> National Monitoring Center of Biodiversity	<b>04-O-01 K. Hikino:</b> Carbon transport and allocation of mature Norway spruce during post-drought recovery after five years of repeated summer droughts	<b>05-O-01 R.R.Y. Oh:</b> Health and wellbeing benefits from nature experiences in Singapore may depend on strength of connection to nature
10:00	<b>Wolfgang Haber:</b> The history of ecology over the past 50 years	<b>02-O-02 E. Meier:</b> Factors driving farmland biodiversity at the landscape scale	<b>03-O-02 A. Bergamini:</b> Monitoring 6000 habitats of national importance in Switzerland: the first 10 years	<b>04-O-02 A. Gessler:</b> Effects of drought on nitrogen uptake and carbon dynamics in trees	<b>05-O-02 K. Uebel:</b> Urban green space soundscapes and their perceived restorativeness
10:10		<b>02-O-03 G. Paterno:</b> Tree-based restoration - islands of diversity in a sea of oil palms	<b>03-O-03 U. Schmiedel:</b> The SASSCAL Observation Net in southern Africa – first results of time-series analyses of 19 years of annual vegetation monitoring	<b>04-O-03 H. Fox:</b> Key genes involved in carbohydrate regulation in trees under drought stress	<b>05-O-03 M. Nawrath:</b> Why cultural ecosystem services matter most: Exploring the pathways linking greenspaces and mental health in a low-income country
10:20	<b>Panel discussion with Markus Fischer &amp; Sepp Settele</b>	<b>02-O-04 A. Wurz:</b> High crop yields without biodiversity loss in tropical agroforestry	<b>03-O-04 L. Lindermann:</b> Standardized nesting aids as sampling method for monitoring cavity nesting wild bees in agricultural landscapes	<b>04-O-04 C. Zahnd:</b> Leaf phenology and non-structural carbohydrate dynamics along the vertical gradient of mature tree canopies	<b>05-O-04 A. Bonn:</b> Linking biodiversity and health - a conceptual framework
10:25		Moderation	Moderation	Moderation	Moderation
10:40	Meet the Speakers (Digital Debate Lounge)	Meet the Speakers (Digital Debate Lounge)	Meet the Speakers (Digital Debate Lounge)	Meet the Speakers (Digital Debate Lounge)	Meet the Speakers (Digital Debate Lounge)
11:00	Break and Networking				
11:50	Track 1	Track 2	Track 3	Track 4	Track 5
	Session 6	Session 2	Session 3	Session 4	Session 5
	Forest Ecosystems and Related Sciences	continued	continued	continued	continued
	F. Huth, T. Gottschalk				
11:50	Moderation		Moderation		Moderation
11:55	<b>06-O-00 T. Gottschalk:</b> Introduction to open forests	<b>02-O-05 M. Sünneemann:</b> Low-intensity land-use enhances soil microbial activity, biomass, and fungal-to-bacterial ratio in current and future climates	<b>03-O-05 V. Zizka:</b> DNA metabarcoding in large-scale insect diversity monitoring	<b>04-O-05 J. Helm:</b> Shift in respiratory substrate use towards lipid metabolism induced by stem girdling?	<b>05-O-05 E. Kühn:</b> Butterfly Monitoring Germany – the benefits of counting butterflies
12:10	<b>06-O-01 M. Theuerkauf:</b> Forest openness in Central Europe before the onset of agriculture - What do we know from palynology?	<b>02-O-06 A. Twerski:</b> Ecosystem functions of rare arable plants	<b>03-O-06 B. Gemeinholzer:</b> Metabarcoding plant and pollen fragments from insect malaise trap preservative ethanol: potential for large-scale biomonitoring	<b>04-O-06 L. Lehmannski:</b> VOC emission in spruce as cause for bark beetle host selection	<b>05-O-06 B. Schröder:</b> Features in and around residential gardens affecting the presence and abundance of questing <i>Ixodes ricinus</i> ticks
12:25	<b>06-O-02 H. Hinneberg:</b> Managing forests for butterfly conservation: a case study on the Southern White Admiral	<b>02-O-07 L. von Klinkowström:</b> Simulation of resistance to dispersal of arthropods and plants in an agricultural landscape	<b>03-O-07 W. Sickle:</b> DNA metabarcoding in insect biodiversity monitoring - an application of eDNA for non-lethal detection of wild bees	<b>04-O-07 R. Koller:</b> Monitoring spatial and temporal growth and carbon dynamics in roots by co-registration of Magnetic Resonance Imaging and Positron Emission Tomography	<b>05-O-07 M. Ebner:</b> An ecosystem service perspective on mountain lakes across socio-ecological contexts
12:40	<b>06-O-03 F. Riesch:</b> Nutrient export through grazing by wild red deer aids the conservation of open habitat types	<b>02-O-08 A. Arquint:</b> Pre-alpine rice paddies – A promising strategy to conserve a subset community of natural wetland aquatic macroinvertebrates on the Swiss plateau	<b>03-O-08 E. Pagel:</b> Genetic monitoring of a decreasing arable weed – strong shifts in genetic composition in <i>Sherardia arvensis</i>	<b>04-O-08 I. Petersen:</b> A trade-off in the carbon allocation of non-vascular plants: nitrogen fixation in relation to photosynthetic performance	Moderation + Meet the Speakers (Digital Debate Lounge)
12:55	Moderation		Moderation		Moderation
13:00	Meet the Speakers (Digital Debate Lounge)	Meet the Speakers (Digital Debate Lounge)	Meet the Speakers (Digital Debate Lounge)	Meet the Speakers (Digital Debate Lounge)	
13:20	Break and Networking				
14:20	<b>Plenum</b>				
	Moderation				
14:25	2. Award Keynote Teja Tschardt (30 min + 10 min discussion)				
15:05	Moderation				
15:10	Meet the speaker (Digitale Debate Lounge)				

# Scientific Programme

Monday 30 August 2021 - continued					
Time	Track 1	Track 2	Track 3	Track 4	Track 5
15:25	Session 6	Session 2	Session 7	Session 8	Session 9
	continued	continued	Automated Biodiversity Monitoring in Ecology L. Opgenoorth, N. Farwig, N. Friess	Multiple Ecosystem Services in Grasslands G. Rosenthal, N. Stanik, E. Jedicke	Scales in Ecology K.M. Meyer, K. Wiegand, B. Tietjen
15:25	Moderation	Moderation	Moderation	Moderation	Moderation
15:30	<b>06-O-04 S. Mallick:</b> Phylogenetic isolation of host-trees reduces resource tracking by herbivorous insects and their parasitoids	<b>02-O-09 E. Török:</b> Supporting biological pest control with different agri-environment schemes	<b>07-O-01 P. Grigusova:</b> Applicability of Time-of-Flight-based cameras for an automatic long-term monitoring of sediment deposition caused by burrowing animals	<b>08-O-01 N. Stanik:</b> Considering multiple ecosystem functions and services of grasslands: A key to support and advance grasslands conservation?	<b>09-O-01 V. Grimm:</b> Separation of time scales: relevant in ecology?
15:45	<b>06-O-05 D. Rieker:</b> Disentangling the importance of space and host for beetle, fungi and bacteria diversity: Lessons from a large dead-wood experiment	<b>02-O-10 S. Möth:</b> Influence of local management and landscape composition on predatory mite populations in three different European wine-growing regions	<b>07-O-02 S. Asgharina:</b> Principles and applicability of TreeTalker, TT+: a two-needle transient thermal dissipation with capacitive sensor enabling real time sap flux density and stem water content measurements	<b>08-O-02 V. Scharnhorst:</b> Ant community composition and functional traits in new grassland strips within agricultural landscapes	<b>09-O-02 T. Wiegand:</b> Upscaling plant community dynamics from the individual to the community scale
16:00	<b>06-O-06 B. Henneberg:</b> Diversity of saproxylic beetles in tree hollows influenced by tree hollow characteristics, forest and landscape structure	<b>02-O-11 V. Wersebeckmann:</b> Maintaining steep slope viticulture for spider diversity	<b>07-O-03 J. Yates:</b> Principles and applicability of IOT for forest measurement TT+: IR and magnetic sensors for measuring stem radial increment	<b>08-O-03 M. Sittinger:</b> Habitat quality assessment of meadows for parasitoid Hymenoptera	<b>09-O-03 F. Leroy:</b> Mapping biodiversity changes across a continuum of spatio-temporal scales
16:15	<b>06-O-07 T. Eckerter:</b> The effect of forest management on cavity nesting bees, wasps and their natural enemies in the Black Forest	<b>02-O-12 A. Krahnert:</b> Novel vineyard design boosts wild bee and butterfly diversity and abundance	<b>07-O-04 J. Gottwald:</b> Advances in open-source sensor development for the observation of movement and behavior of bats	<b>08-O-04 G. Walther:</b> The role of functionally rare species for ecosystem processes in mesophilic grasslands – lessons learnt from a long term experiment	<b>09-O-04 C. Graham:</b> Drivers of resource specialization vary across spatial and temporal scales
16:30	Moderation	Moderation	Moderation	Moderation	Moderation
16:35	Meet the Speakers (Digital Debate Lounge)	Meet the Speakers (Digital Debate Lounge)	Meet the Speakers (Digital Debate Lounge)	Meet the Speakers (Digital Debate Lounge)	Meet the Speakers (Digital Debate Lounge)
16:55	<b>Break and Networking</b>				
17:25	<b>Posterlounge</b>				
	Poster Session: 02-P-01, 02-P-02, 02-P-03, 03-P-01, 03-P-02, 03-P-05, 03-P-06, 03-P-07, 03-P-08, 05-P-01, 06-P-01, 06-P-02, 06-P-03, 06-P-04, 07-P-01, 07-P-02, 09-P-01, 09-P-02, 09-P-03				
18:25	Track 1	Track 2	Track 3	Track 4	Track 5
	Session 6	Session 2	Session 7	Session 8	Session 9
	continued	continued	continued	continued	continued
18:25	Moderation	Moderation	Moderation	Moderation	Moderation
18:30	<b>06-O-08 P.L. Kohl:</b> Population demography of feral honey bee colonies in German forests	<b>02-O-13 A. Hass:</b> Local and landscape effects of agri-environment schemes and crops on pollen collection of bumble bees in agricultural landscapes	<b>07-O-05 K. Lindner:</b> Towards automated bird censuses using spatially distributed sensors and artificial intelligence – a comparison with real world community data	<b>08-O-05 E. Slabbert:</b> Biogeography can be more important than land management in shaping biotic above- and below-ground communities.	<b>09-O-05 G. Dressler:</b> Upscaling in socio-environmental systems modelling: Current challenges, promising strategies and insights from ecology
18:45	<b>06-O-09 K. Mausolf:</b> FraDiv: Strategies for biodiversity conservation – Establishment of a biodiversity-ecosystem functioning experiment against the background of the ash dieback disease	<b>02-O-14 N. Beyer:</b> Mass-flowering crop effects on pollinator densities, pollinator behavior and pollination services	<b>07-O-06 T. Wulf:</b> Detection of meadow breeding birds using UAVs and thermal image camera with disturbance analysis measuring the heartbeat rate	<b>08-O-06 O. Buzhdygan:</b> Plant diversity effects on multitrophic ecosystem functions depend on network contexts and diversity facets	<b>09-O-06 M. Gossner:</b> Forest management, biodiversity and ecosystem functions - to what extent are these relationships scale-dependent?
19:00	<b>06-O-10 J. Glatthorn:</b> Lower species diversity of seven taxonomic groups in pure European beech stands compared with pure stands of Douglas-fir and Norway spruce or mixed stand of both conifers with beech	<b>02-O-15 M. Anders:</b> Ecological intensification through integrated pollination management in macadamia orchards	<b>07-O-07 M. Körschens:</b> Automated plant cover prediction with convolutional neural networks	<b>08-O-07 L. Argens:</b> Trade-offs between ecosystem functions vary depending on year, season, and identity of ecosystem functions	<b>09-O-07 C. Ocampo-Ariza:</b> Contrasting patterns of functional diversity and similarity of bird communities in tropical agroforests
19:15	<b>06-O-11 A. Prinzing:</b> Eco-evolutionary feedbacks of climate on climate via the tree phenotype	<b>02-O-16 L. Hertzog:</b> Impact of policy-induced changes in fallow land area on farmland bird populations	<b>07-O-08 C. Beilschmidt:</b> Geo engine: Data fusion inside your Data portal	<b>08-O-08 F. Richter:</b> Provision of multiple ecosystem services in extensively and intensively managed organic and conventional grasslands in Switzerland	<b>09-O-08 N. Hellwig:</b> Wild bee assemblages on wildflower strips: Data resolution and spatial scale are key to disentangling effects of landscape structure and agricultural practices
19:30	<b>06-O-12 K.J.E. Steffens:</b> Increasing the conservation value of tree plantings in Madagascar by the inclusion of lemur food plants and utilitarian plant species	<b>02-O-17 K. Hemminger:</b> Interactions between the world's crane species (Gruidae) and the agricultural sector	Moderation + Meet the Speakers (Digital Debate Lounge)	Moderation + Meet the Speakers (Digital Debate Lounge)	<b>09-O-09 P. Scherrei:</b> Effects of historical landscape structure on current community trait composition of plants and arthropods in Central European grasslands
19:45	Moderation	Moderation			Moderation
19:50	Meet the Speakers (Digital Debate Lounge)	Meet the Speakers (Digital Debate Lounge)			Meet the Speakers (Digital Debate Lounge)
20:10	<b>Break and Networking</b>				
20:25	<b>Lounge - Specific Tables</b>				
	<b>AK Treffen Bodenökologie</b>	<b>AK Treffen Agrarökologie</b>	<b>AK Treffen Urban Ecology</b>	<b>Initiativkreis Remote Sensing</b>	<b>Stammtisch AK Popbio</b>
22:00	<b>End Day 1</b>				

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Tuesday, 31 August 2021					
08:00	Log-in of participants and tech-check				
08:15	Plenum				
	Moderation				
08:20	Keynote Gerlinde B. De Deyn (30 min + 10 min discussion)				
09:00	Moderation				
09:05	Meet the Speaker (Digitale Debate Lounge)				
09:20	Break				
09:25	Track 1	Track 2	Track 3	Track 4	Track 5
	Session 10	Session 11	Session 12	Session 13	Workshop 2
	Impacts of Recent Climate Extremes on EF	Scales and Patterns of Soil Microbial Diversity	Dynamic Ecosystems	Free Topics	Citizen Science Dialog Workshop
09:25	Moderation	Moderation	Moderation	Moderation	
09:30	<b>10-O-01 A. Bolte:</b> Recent and future forest mortality in Germany - what will come after the spruce age?	<b>11-O-01 M. Kästner:</b> Microbial necromass in soil organic matter - implications for soil microbial ecology	<b>12-O-01 K. Löhms:</b> Dynamics of salt marsh plant communities in response to environmental conditions and habitat fragmentation	<b>13-O-02 M. Hanusch:</b> Succession comprises a sequence of threshold-induced community assembly processes towards multidiversity	
09:45	<b>10-O-02 M. Arend:</b> Beyond the borders of tree physiological function: tree responses to the exceptional 2018 summer drought.	<b>11-O-02 M. Hemkemeyer:</b> Importance of soil primary particles for shaping the diversity and activity of soil microbial communities – Results of a meta-analysis	<b>12-O-02 M. Lattuada:</b> SeaStore: Diversity enhancement through seagrass restoration	<b>13-O-03 B. Moncalvillo:</b> Host age at time of attachment affects the performance of the root hemiparasitic plant <i>Rhinanthus alectorolophus</i>	
10:00	<b>10-O-03 E. R. Frei:</b> Early leaf fall of European beech during the 2018 summer drought: sign of impairment or strategy of stress avoidance?	<b>11-O-03 D. Finn:</b> Soil prokaryote richness follows classic species-area relationships across scales with consequences for large-scale composite sampling	<b>12-O-03 R. Wöllner:</b> Colonisation and gene flow in a highly dynamic habitat: Case of <i>Myricaria germanica</i> fourteen years after river restoration	<b>13-O-04 M. Rinke:</b> Indications of allochthonous marine resource use in salt marsh mesofauna of the Wadden Sea – a stable isotope ( <sup>15</sup> N, <sup>13</sup> C) study	
10:15	<b>10-O-04 B. Hesse:</b> Repeated summer drought impairs the water balance of spruce stronger than of beech in intra- and interspecific competition	<b>11-O-04 L. Rüger:</b> Assembly patterns of the rhizosphere microbiome along the longitudinal root axis of maize ( <i>Zea mays</i> L.)	<b>12-O-04 S. Fink:</b> Habitat model for riparian plant establishment in dynamic riverine zones	<b>13-O-05 L. Rutina:</b> Elephant and mammalian herbivores communities' structure in Chobe District, Botswana	
10:30	Moderation	Moderation	Moderation	Moderation	
10:35	Meet the Speakers (Digital Debate Lounge)	Meet the Speakers (Digital Debate Lounge)	Meet the Speakers (Digital Debate Lounge)	Meet the Speakers (Digital Debate Lounge)	
10:55	Break				
11:05	Track 1	Track 2	Track 3	Track 4	Track 5
	Session 10	Session 11	Session 12	Session 13	Workshop 2
	continued	continued	continued	continued	continued
11:05	Moderation	Moderation	Moderation	Moderation	
11:10	<b>10-O-05 J. Idoate Lacasia:</b> Drivers of long-term change in biomass in Swiss forest reserves	<b>11-O-05 J. Whitehead:</b> Investigating microbial diversity across an urbanity gradient in Berlin	<b>12-O-05 S. Stein:</b> Dynamische Ökosysteme in der Betreuung durch Bundesforst	<b>13-O-06 M. Felipe-Lucia:</b> Land-use intensity alters networks between biodiversity, ecosystem functions and services	
11:25	<b>10-O-06 A. Kübert:</b> Grasslands under stress: nitrogen loading intensifies drought impact through vegetation shifts	<b>11-O-06 C. Bässler:</b> Measures of phylogenetic diversity illuminate structuring of mushroom assemblages across Europe	<b>12-O-06 N. Lenzewski:</b> Plant biodiversity of urban stormwater ponds	<b>13-O-07 H. Moor:</b> Massive conservation action leads to the recovery of amphibian populations at a regional scale	
11:40	<b>10-O-07 M. Thavhana:</b> Drivers of Net Primary Production (NPP) changes in southern Africa – satellite estimates and process-based dynamic vegetation modelling	Moderation + Meet the Speakers (Digital Debate Lounge)	<b>12-O-07 H. Grote:</b> Die militärische Nutzung als Grundlage der dauerhaften Erhaltung von dynamischen Lebensräumen und Pionierarten – Zufall oder Ergebnis einer gezielten Bewirtschaftung?	Moderation + Meet the Speakers (Digital Debate Lounge)	
11:55	Moderation		Moderation		
12:00	Meet the Speakers (Digital Debate Lounge)		Meet the Speakers (Digital Debate Lounge)		
12:20	Break and Networking				
12:50	Plenum				
	Moderation				
12:55	Keynote Britta Tietjen (30 min + 10 min discussion)				
13:35	Moderation				
13:40	Meet the speaker (Digitale Debate Lounge)				

Time	Track 1	Track 2	Track 3	Track 4	Track 5
13:55	Session 14	Session 15	Session 16	Session 17	Diskussionsrunde
	Macroecology - from Traits to Ecosystems	Soil Biodiversity, Soil Functions and ESS	Drylands in Transition	Decline of Insect Abundance and Diversity	Alternative Energiepflanzen - Chance für Natur UND Landwirtschaft?
	C. Hof, H. KrefT	M. Potthoff, S. Schrader	A. Linstädter, L. Kindermann, N. Blaum	T. Frank	
13:55	Moderation	Moderation	Moderation	Moderation	
14:00	<b>14-O-01 M. Biddick:</b> A simple null model predicts the island rule	<b>15-O-01 C. van Capelle:</b> Bioregulation of Fusarium and its mycotoxins in maize residues by earthworms ( <i>Lumbricus terrestris</i> )	<b>16-O-01 L. Szangolies:</b> Namibian rangelands in transition: Towards sustainable herbivore compositions for savanna management	<b>17-O-01 S. Pietsch:</b> The importance of dead wood amount for preserving insect diversity in naturally disturbed forests	
14:15	<b>14-O-02 J. Schrader:</b> A trait-based guide to test for assembly processes in island communities: community trait means, functional diversity and trait spaces	<b>15-O-02 L. Wöhl:</b> Ecosystem services during earthworm-controlled litter decomposition in annual and perennial energy plants	<b>16-O-02 F. Koch:</b> A dynamical systems approach to bush encroachment: Increasing farmer investment leads to bistability and increases the susceptibility of savannas to drought	<b>17-O-02 R. Mühlethaler:</b> Diversity of Insects in Nature protected Areas (DNA) – insect decline from a scientific and societal perspective	
14:30	<b>14-O-03 A.M. Bastidas-Urrutia:</b> Island characteristics shape the trait spaces of island bird communities	<b>15-O-03 P.D. Diah Lobe:</b> How energy crops (maize, cup plant, and field grass) affect soil microarthropods and their decomposition services	<b>16-O-03 K. Irob:</b> Wildlife in favor for a healthy savannah state - a model-based comparison of alternative land use strategies	<b>17-O-03 D. Höhn:</b> Tits as monitors of insect biodiversity	
14:45	<b>14-O-04 P.M. Eibes:</b> Habitat islands in an arid "ocean": relative importance of different spatial characteristics on species richness and percentage endemism	<b>15-O-04 A. Potapov:</b> Multifunctionality of belowground food webs	<b>16-O-04 L. Kindermann:</b> Improving estimation of woody aboveground biomass in drylands by accounting for disturbance effects	<b>17-O-04 L. Guderjan:</b> Drifting pesticides impact butterfly diversity and abundance in a mosaic landscape	
15:00	<b>14-O-05 A.V. Mayr:</b> Seasonal variation in the ecology of tropical cavity-nesting Hymenoptera	<b>15-O-05 K. John:</b> Land use intensity of grasslands affects the taxon-specific resilience of soil fauna communities after pulse stress	<b>16-O-05 S. Getzin:</b> Timing in fieldwork on Namib fairy circles matters: grass dieback in circles happens immediately after rainfall	<b>17-O-05 D. Wintermantel:</b> Negative effects of the fungicide Amistar on bumblebees are resource-dependent	
15:15	Moderation	Moderation	Moderation	Moderation	
15:20	Meet the Speakers (Digital Debate Lounge)	Meet the Speakers (Digital Debate Lounge)	Meet the Speakers (Digital Debate Lounge)	Meet the Speakers (Digital Debate Lounge)	
15:40	<b>Break and Networking</b>				
16:00	<b>Poster Lounge</b>				
	Poster Session: 10-P-01, 10-P-02, 11-P-01, 12-P-01, 13-P-01, 13-P-02, 13-P-03, 13-P-04, 13-P-05, 13-P-06, 13-P-07, 13-P-08, 14-P-01, 14-P-02, 14-P-03, 14-P-04, 14-P-05, 14-P-06, 14-P-07, 14-P-08, 15-P-01, 16-P-01, 16-P-02				
17:00	Track 1	Track 2	Track 3	Track 4	Track 5
	Session 14	Session 15	Session 16	Session 17	Workshop 1
	continued	continued	continued	continued	Citizen Science in den Agrarräumen
17:00	Moderation	Moderation	Moderation	Moderation	
17:05	<b>14-O-06 S. Ghosh:</b> A global analysis of community stability across freshwater and terrestrial realms	<b>15-O-06 R. Beugnon:</b> Tree diversity effects on litter decomposition are mediated by litterfall and microbial processes	<b>16-O-06 L.M. Schwarz:</b> Studying transitions in ecological systems by applying an integrated social-ecological framework	<b>17-O-06 M. Jochum:</b> Aboveground impacts of a belowground invader: how invasive earthworms alter aboveground arthropod communities in a northern North American forest	
17:20	<b>14-O-07 R. Novella Fernandez:</b> Broad-scale patterns of geographic avoidance between species emerge in the absence of fine-scale mechanisms of coexistence	<b>15-O-07 G. Berg:</b> Soil microbial diversity is crucial for plant health throughout plants lifecycle	<b>16-O-07 K. Behn:</b> Drought length matters for vegetation resistance and resilience in a South African savanna grassland	<b>17-O-07 F. Gebert:</b> Recent developments in aquatic insect diversity in Switzerland	
17:35	<b>14-O-08 S. Rubansch:</b> Environmental conditions drive the potential biotope composition in Bavaria	<b>15-O-08 R. Zeiss:</b> How (well) does European policy protect soil organisms. Challenges of protecting European belowground biodiversity beyond productive systems	<b>16-O-08 V. Mokoka:</b> What characterizes winner and loser species? Effects of severe drought and grazing on dryland grassland	<b>17-O-08 K. Thierolf:</b> The effect of climate warming on bumblebee diversity and community composition along the elevation gradient of the Kalsbach-Valley in East Tyrol: a historical comparison	
17:50	<b>14-O-09 T. Conradi:</b> From niches to biomes: integrating a process-based niche model for plants and botanical big data for projecting largescale ecosystem change	Moderation + Meet the Speakers (Digital Debate Lounge)	<b>16-O-09 Y. Jäschke:</b> Vegetation transitions in eastern Mongolian steppe	<b>17-O-09 J. Kerner:</b> Effects of climatic changes on butterflies and host plants along an elevational gradient in the German Alps	
18:05	<b>14-O-10 C. Meyer:</b> Global changes in terrestrial, freshwater, and coastal ecosystem extents over three decades	<b>Meet the DFG Q&amp;A with Dr. Meike Teschke</b>	<b>16-O-10 J. Ahlborn:</b> Climate-grazing interactions in Mongolian rangeland vegetation	<b>17-O-10 A. C. Mupepele:</b> Ground-nesting bee survival after soil disturbance	
18:20	<b>14-O-11 S. Fritz:</b> Does paleo-climate drive the evolution of climatic niches? Insights from a passerine bird clade		<b>16-O-11 Y. Tesfay:</b> The invasive <i>Opuntia ficus-indica</i> homogenizes native plant species compositions in the highlands of Eritrea	Moderation + Meet the Speakers (Digital Debate Lounge)	
18:35	Moderation		Moderation		
18:40	Meet the Speakers (Digital Debate Lounge)		Meet the Speakers (Digital Debate Lounge)		
19:00	<b>GfÖ General Meeting, Mitgliederversammlung</b>			<b>Online-Party with DJ barhockel &amp; DJ Mr Gin &amp; MC Madame Bombina</b>	
20:00					
22:00					
00:00	<b>End Day 2</b>				

# Scientific Programme

## 50<sup>th</sup> GfÖ Conference

Time					
<b>Wednesday 1 September 2021</b>					
08:00	<b>Log-in of participants and tech-check</b>				
08:15	<b>Plenum</b>				
	Moderation				
08:20	<b>Keynote Carsten Dormann (30 min + 10 min discussion)</b>				
09:00	Moderation				
09:05	<b>Meet the speaker (Digitale Debate Lounge)</b>				
09:20	<b>Break and Networking</b>				
9:50	<b>Track 1</b>	<b>Track 2</b>	<b>Track 3</b>	<b>Track 4</b>	<b>Track 5</b>
	<b>Session 18</b>	<b>Session 19</b>	<b>Session 20</b>	<b>Session 21</b>	<b>Session 22</b>
	<b>Remote Sensing of Ecosystems</b>	<b>Urban Ecology</b>	<b>Methods and Models</b>	<b>Variability of Traits</b>	<b>Biotic Interactions under Climate and Global Change</b>
	A. Große-Stoltenberg, S. Erasm	M. Egerer, L. Fischer, S. Knapp, M. Strohbach	F. Hartig, L. Hertzog, G. Wallentin	S.F. Bucher, S. Rosbakh, N. Scheepens	K. Budde, K. Blumenstein
09:50	Moderation	Moderation	Moderation	Moderation	Moderation
09:55	<b>18-O-01 B. Price:</b> Developing a spatially explicit, nation-wide habitat map with remote sensing: Challenges, data and methods	<b>19-O-00 S. Knapp:</b> GfÖ @ Urban Ecology	<b>20-O-01 D. Zurell:</b> ODMAP: a tool and protocol for standardized reporting of species distribution models	<b>21-O-01 S. Kurze:</b> Evaluating drought response strategies in winter annuals: a multi-trait approach	<b>22-O-01 J. Witzell:</b> Barriers, carriers and corridors – relevance of forest spatial arrangements for tree-pathogenic fungi
10:10	<b>18-O-02 K. Ramskogler:</b> Modelling vegetation dynamics from satellite time series to estimate proglacial primary succession in the course of global warming - a case study in the Eastern Italian Alps	<b>19-O-01 K. Vega:</b> Urban wildflower biodiversity - the role of human actions and natural processes in Zurich	<b>20-O-02 M. Pichler:</b> Scalable and accurate (Joint) Species Distribution Modeling of big community data using the R-package sjSDM	<b>21-O-02 C. Kiene:</b> Fertilization and drought: Is species drought resistance affected by trait plasticity in response to nutrients?	<b>22-O-02 C. Romeralo:</b> Factors influencing community composition of fungal and bacterial microbiome in Scots pine seedlings ( <i>Pinus sylvestris</i> L.) in Southern Sweden.
10:25	<b>18-O-03 S. Bae:</b> Tracking the temporal dynamics of insect defoliation by high-resolution radar satellite data	<b>19-O-02 G. Marcacci:</b> Taxonomic and functional homogenization of farmland birds along an urbanization gradient in a tropical megacity	<b>20-O-03 A.K. Malchow:</b> RangeShiftR: Individual-based population modelling and simulation of spatial evolutionary dynamics in R	<b>21-O-03 S. Rosbakh:</b> Rising CO <sub>2</sub> concentrations reduce nitrogen availability in alpine grasslands	<b>22-O-03 G. J. Langer:</b> Latent fungal pathogens associated with woody tissues of European beech and their impact on tree health
10:40	<b>18-O-04 M. Safaei:</b> Mapping ecosystem degradation in Iranian semi-steppe rangelands using remote sensing	<b>19-O-03 C. Scholz:</b> The secret of success: Insights into the ecology of urban red foxes	<b>20-O-04 J. Blechschmidt:</b> Parameterization of a process-based model for range dynamics of plant species using the virtual ecologist approach	<b>21-O-04 S. Löbel:</b> Biological traits explain deadwood bryophyte species responses to national climate and forestry scenarios in Sweden: winners are large competitors, and losers are small, short-lived species	<b>22-O-04 B. Durodola:</b> Mycobiome composition of Norway spruce stems and roots is influenced by genotype after artificial inoculation with <i>Heterobasidion parviporum</i>
10:55	<b>18-O-05 C. Raab:</b> Assessing agricultural land fragmentation in Central Asia using Landsat time series data	<b>19-O-04 G. Donati:</b> Multi-species assessment of core areas and connectivity of amphibians in human-dominated landscapes	<b>20-O-05 B. Hess:</b> Modelling the spread- and establishment potential of climate-sensitive plant pests for proactive phytosanitary risk analyses	<b>21-O-05 L. Chalmardrier:</b> Predictions of biodiversity are improved by integrating trait-based competition with abiotic filtering	<b>22-O-05 X. He:</b> Adding causality to correlations: Validation of predictive models in lab experiments on plant-microbe interaction in an alpine succession
11:10	<b>18-O-06 H. Feilhauer:</b> Do we have to spend more time in the lab?	<b>19-O-05 D. Goertzen:</b> Freshwater biodiversity conservation in cities – a multi-scale perspective	<b>20-O-06 H. Meyer:</b> A new method to assess the area of applicability of spatial prediction models	<b>21-O-06 S. Klingenfuss:</b> Responses of functional diversity in forest understory to resource heterogeneity	<b>22-O-06 L.R. Nielsen:</b> Microbial community structure in ash with special focus on <i>Fraxinus excelsior</i> and ash dieback
11:25	Moderation	Moderation	Moderation	Moderation	Moderation
11:30	Meet the Speakers (Digital Debate Lounge)	Meet the Speakers (Digital Debate Lounge)	Meet the Speakers (Digital Debate Lounge)	Meet the Speakers (Digital Debate Lounge)	Meet the Speakers (Digital Debate Lounge)
11:50	<b>Break and Networking</b>				
12:50	<b>Plenum</b>				
	Moderation				
12:55	<b>Keynote Aletta Bonn (30 min + 10 min discussion)</b>				
13:35	Moderation				
13:40	<b>Meet the speaker (Digitale Debate Lounge)</b>				

# Scientific Programme

## 50<sup>th</sup> GfÖ Conference

Time					
Wednesday 1 September 2021 - continued					
	Track 1	Track 2	Track 3	Track 4	Track 5
13:55	Session 18	Session 19	Session 20	Session 21	Session 22
	continued	continued	continued	continued	continued
13:55	Moderation	Moderation	Moderation	Moderation	Moderation
14:00	<b>18-O-07 M. Ludwig:</b> Increasing the transferability of global spatial prediction models	<b>19-O-06 M. Weber:</b> Impact of different landscape factors on the wild bee community of the city of Braunschweig	<b>20-O-07 A. Schroeder:</b> Arresting succession to create alternative ecosystem states	<b>21-O-07 L. Heidrich:</b> Colour lightness as a measure to predict the response of moths to environmental change – chance and challenges	<b>22-O-07 J.M. Doonan:</b> Genome wide association studies explore the genetic basis of resistance to ash dieback fungus in <i>Fraxinus excelsior</i>
14:15	<b>18-O-08 F. Männer:</b> Grassland forage provision predicted by hyperspectral reflection readings across climate zones	<b>19-O-07 A.E. Neumann:</b> Urban garden research in two German cities	<b>20-O-08 J. Heineremann:</b> Modelling mixed species regeneration below a pine dominated overstorey under dry and nutrient-poor conditions in Brandenburg	<b>21-O-08 S. Still:</b> Phenological responses and the impact of temperature on winter leaf production in European woodland strawberry ( <i>Fragaria vesca</i> ) genotypes	<b>22-O-08 R. Enderle:</b> Analysing the variation in virulence of the ash dieback pathogen <i>Hymenoscyphus fraxineus</i>
14:30	<b>18-O-09 F. Hermanns:</b> Can unsupervised learning from hyperspectral imagery advance ecosystem stress monitoring? Case study of a grassland site	<b>19-O-08 E. Obermaier:</b> Botanical Gardens as biodiversity hotspots and multipliers in urban areas	<b>20-O-09 B. Mattsson:</b> Quantifying the contribution of habitats and pathways to a spatially structured population facing environmental change	<b>21-O-09 D. Jakubka:</b> The PhenObs initiative - Linking plant phenology to functional traits in herbaceous species in Botanical Gardens	<b>22-O-09 F. Wesener:</b> Heat stress affects soil fungal competition and their interaction types - a modelling approach
14:45	<b>18-O-10 C.I.B. Wallis:</b> Spectral diversity of tree crowns along an elevational gradient in southern Québec, Canada	<b>19-O-09 V. Volke:</b> Forecasting the cooling potential and drought resistance of street trees by species' functional traits	<b>20-O-10 P. Porada:</b> Estimating ecosystem functions of non-vascular vegetation by process-based modeling	<b>21-O-10 H. Hollens-Kuhr:</b> Pollinator community predicts trait-matching between spurs of oil-producing flowers and forelegs of a guild of oil-collecting bees	<b>22-O-10 K. Sam:</b> When and where do the predators keep the plants flourish?
15:00	Moderation + Meet the Speakers (Digital Debate Lounge)	<b>19-O-10 M. Riffat:</b> Urban biodiversity and ecosystem services dashboards to inform planning and governance: a review of best practices	<b>20-O-11 Y. Ma:</b> Predicting the functional traits composition shifts of non-vascular vegetation along climate gradients using a process-based model	<b>21-O-11 B. Stojanova:</b> Effect of drought and competition on cleistogamy-phenotypic plasticity and developmental constraints	Moderation + Meet the Speakers (Digital Debate Lounge)
15:15		Moderation	Moderation	Moderation	
15:20		Meet the Speakers (Digital Debate Lounge)	Meet the Speakers (Digital Debate Lounge)	Meet the Speakers (Digital Debate Lounge)	
15:40	<b>Break and Networking</b>				
16:10	<b>Posterlounge</b>				
	<b>Poster Session:</b> 18-P-01, 18-P-02, 18-P-03, 18-P-04, 18-P-05, 19-P-01, 19-P-02, 19-P-03, 19-P-04, 20-P-01, 20-P-02, 20-P-03, 20-P-04, 20-P-05, 21-P-01, 22-P-01, 22-P-02, 22-P-03, 22-P-04, 22-P-05, 23-P-01, 24-P-01, 25-P-01, 25-P-02, 25-P-03, 25-P-04, 25-P-05, 25-P-06, 25-P-07				
17:10	Track 1	Track 2	Track 3	Track 4	Track 5
	Session 23	Session 24	Session 20	Session 21	Session 25
	EU-Living Labs in Agricultural Settings  F. Nürnberger, M. Busse, A. Richter	Towards Multi-Functional Forests  J. Röder, S. Hotes	continued	continued	Wildflower Strip Efficiency  T. Diekötter, F. Jauker
17:10	Moderation	Moderation	Moderation	Moderation	Moderation
17:15	<b>23-O-01 F.D. Schneider:</b> Social Labs for mediating biodiversity conflicts between agricultural practice and insect decline in protected areas	<b>24-O-01 B. Uhl:</b> Relative importance of dead wood types and microclimate on saproxylic diversity – a cross-taxonomic, experimental approach	<b>20-O-12 F. Duchenne:</b> Phenological traits foster persistence of mutualistic networks by promoting facilitation	<b>21-O-12 T. Mašková:</b> Ecology insight to the seed nutrient composition	<b>25-O-01 U. Neumüller:</b> Managing flower plantings for wild bee conservation – Lessons learned from the BienABest project
17:30	<b>23-O-02 F. Nürnberger:</b> An Agroecosystem Living Lab approach to facilitate Insects in agricultural landscapes	<b>24-O-02 F.S. Krahl:</b> Response of mushrooms to harsh microclimate is best explained by their toughness-protection hypothesis	<b>20-O-13 A. Gupta:</b> Simultaneously estimating food web complexity and structure with uncertainty	<b>21-O-13 J. Zhu:</b> Seed dispersal by wind decreases when plants are water-stressed, potentially counteracting species coexistence and niche evolution	<b>25-O-02 S. Blümel:</b> Attractiveness of different flower strips for beneficial arthropods of agricultural landscapes
17:45	<b>23-O-03 P.E. Mellander:</b> A decade of holistic agro-environmental studies within six living labs in the Irish Agricultural Catchments Programme	<b>24-O-03 J. Haggé:</b> What does a threatened saproxylic beetle look like? Modelling extinction risk using a new morphological trait database	<b>20-O-14 R. Junker:</b> Digital phenotyping of plant individuals and communities in trait-based ecology	<b>21-O-14 C. Buchmann:</b> A novel and universal method for improved measurement of seed terminal velocity	<b>25-O-03 F. Baden-Böhm:</b> Effects of biodiversity measures on abundance of bumblebees ( <i>Bombus terrestris</i> ) in agricultural landscapes assessed with a simulation modelling approach
18:00	<b>23-O-04 E. Angarita:</b> ATP-AgriLandLab: A roadmap for the establishment and monitoring of Living Labs for the transformation of European agriculture	<b>24-O-04 L.H. Teixeira:</b> The phylogenetic signature of Atlantic Forest restoration: a systematic review	<b>20-O-15 T. Waldau:</b> A model method for the spatial distribution of agricultural host plants to support pest modelling	<b>21-O-15 T. Sandner:</b> Adaptation of the hemiparasitic plant <i>Rhinanthus alectorolophus</i> to its potential host plant <i>Plantago lanceolata</i>	<b>25-O-04 S. Baum:</b> What are we talking about? Patterns in the implementation of wildflower strips and fallows by German farmers
18:15	Moderation + Meet the Speakers (Digital Debate Lounge)	Moderation + Meet the Speakers (Digital Debate Lounge)	<b>20-O-16 M. Grenié:</b> Matching species names in biodiversity databases: database relationships, tools, pitfalls and best practices	Moderation + Meet the Speakers (Digital Debate Lounge)	Moderation + Meet the Speakers (Digital Debate Lounge)
18:30			Moderation		
18:35			Meet the Speakers (Digital Debate Lounge)		
18:55	<b>Break</b>				
19:00	<b>Plenum</b>				
	<b>GfÖ Award Session</b>				
20:00	<b>Closing Address</b>				
20:30	<b>End Day 3</b>				