IBS2015
International
Biogeography Society
7th Biennial Conference
Bayreuth | Germany

Conference Guide

Bayreuth Center of Ecology
and Environmental Research

Bayceer

UNIVERSITÄT
BAYREUTH

IBS2015

International Biogeography Society
7th Biennial Conference
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Co-Organizers

International Biogeography Society

Bayceer

biogeografie uni bayreuth

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Bayreuth Center of Ecology and Environmental Research (BayCEER)

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Imprint:
Publisher:
Bayreuth Center of Ecology and Environmental Research (BayCEER)
Editors:
Birgit Thies, Leonor Álvarez-Cansino, Johannes Ransijn, Stefan Holzheu
Design**:** Stefan Schlags www.schlagsdesign.de
Editorial deadline: 18.12.2014

Welcome!

Dear participants of the IBS 2015 conference in Bayreuth!

IBS conferences are always special. Their biennial rhythm and the shift between continents in combination with the philosophy of diversity and the focus on selected symposia are providing meetings with a very special character.

This conference will deliver an excellent forum for ideas and networking. Biogeography is a flourishing field of science. Its increasing attraction is reflected in the variety of topics and in the great number of participants. Methodological innovation in remote sensing, new techniques in phylogeny, enormous amounts of data that are becoming accessible, and new perspectives to the history of biota and ecosystems are linked to fundamental questions in basic research and to societal challenges and applied fields. The scales of biogeography - ranging from regional to global extent and from short-time trends to evolutionary time periods - could never be addressed adequately without powerful approaches.

The University of Bayreuth was founded 40 years ago. Since the beginning, 'Ecology and Environmental Research' is a focal area, which is supported and implemented by BayCEER (Bayreuth Center of Ecology and Environmental Research). Biogeography courses are contributing to the study programs in 'Geoecology' (B.Sc., M.Sc.), 'Geography' (B.Sc.), 'Global Change Ecology' (M.Sc.), 'Physical Geography' (M.Sc.) and 'Biodiversity and Ecology' (M. Sc.). Biogeographical research covers a broad spectrum of approaches including experiments, modelling, data mining and field work in various continents. Grasp the opportunity and visit our unique Ecological-Botanical Gardens and the EVENT and SIGNAL experiments on ecological responses to climatic extremes and invasion processes.

You may join one of our excursions to get in touch with the diversity of cultural landscapes, site conditions, and ecosystems in Upper Franconia. This was the training ground for Alexander von Humboldt as a director of mining in his first and only employment. The area is hosting an extraordinary variety of bedrock and climate which is translated into a mosaic of ecological complexity. Additionally, the legacy of historic land uses is traced by patterns in species populations. The distance decay of functional anthropogenic influences on biota and habitats, starting from the focal points of compact settlements, can be seen in the logo of our conference, where the central red dot represents a village. Decreasing human impact resulted in characteristic gradients of land use intensity from gardens over agricultural fields and meadows to pastures and forests (Thuenen Rings), being equally fragmented and connected via linear landscape elements.

We hope that you will enjoy your stay and find inspiration for your future research.
We do our best to host a conference that you will keep in good memory.

Sincerely,

Carl Beierkuhnlein

Plenary Lectures

Opening Lecture

Friday January 9
8:45, Audimax

Helmut Schwarz
President of the
Alexander von Humboldt Foundation

Alexander von Humboldt as a role model for modern scientists and science institutions

The accomplishments of Alexander von Humboldt as an explorer and universal scholar were pioneering for many scientific fields. His genius and curiosity were boundless, and his work and life border-crossing in many aspects; he set standards that shape our understanding of science until today. As a gifted networker he was in contact with scientists from all over Europe, and he supported young researchers with enthusiasm and emphasis. Following his example is a guiding principle for excellence in science - both for scientists and for science organizations.

MacArthur & Wilson Award Presentation and Lecture

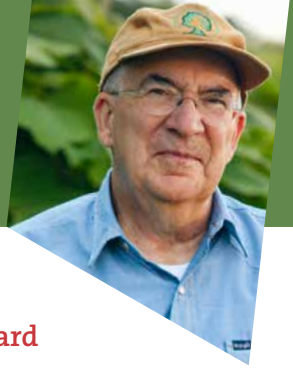
Saturday January 10
11:15, **Audimax**

Daniel L. Rabosky
University of Michigan, USA

Speciation, extinction, and the geography of species richness

Species richness varies dramatically across the surface of the Earth. The latitudinal diversity gradient is a striking example of this variation, but many physiographically-comparable regions are characterized by disparate patterns of species diversity. Despite decades of interest in these patterns, we still do not fully understand why some regions contain more species than others. I will discuss the contribution of speciation and extinction rates to geographic variation in species richness, focusing in particular on the latitudinal diversity gradient in terrestrial vertebrates. I will describe the inference of these evolutionary rates from time-calibrated phylogenetic trees of extant species, and I will highlight some potential pitfalls in analyzing the geography of diversification. I will explain how new methodological tools and phylogenetic frameworks are providing unprecedented resolution into the causes of large-scale diversity gradients.

The MacArthur & Wilson Award recognizes an outstanding early-career scientist that has made innovative, substantive, broad and important contributions to the discipline of biogeography and is named in honor of Robert H. MacArthur and Edward O. Wilson



Alfred Russel Wallace Award Lecture

Sunday January 11
16:30, **Audimax**

Daniel Simberloff
Department of Ecology and Evolutionary Biology, University of Tennessee, USA

Character displacement and release in the small Indian mongoose and the stone marten

co-authored with
Arijana Barun and Shai Meir

In its native Asian range, the small Indian mongoose (*Herpestes auropunctatus*) coexists with larger carnivores, including congeners. Introduced to many islands worldwide, and to the South American mainland, it is the only carnivore except in South America, on Trinidad, and on several Adriatic islands. On all but Adriatic islands, it is generally larger than in Asia, consistent with the hypothesis of character displacement in its native range and character release on these islands. With the larger native stone marten (*Martes foina*), it co-occupies three Adriatic islands and is approximately the same size as in Asia, consistent with these hypotheses. Results from Trinidad and South America are ambiguous, perhaps because coexisting carnivores there are much larger. The marten, sole carnivore, is smaller on three Adriatic islands lacking the mongoose than on Adriatic islands with the mongoose and than in many other European locations, where it coexists with both larger and smaller mustelids, again consistent with the hypotheses of character displacement and release. Other hypotheses for these patterns seem less plausible, but several anomalies remain unexplained.

The Wallace Award was established by the IBS in 2004 to recognize a lifetime of outstanding contributions by an eminent scholar in any subdiscipline of biogeography.

PS1

Plenary Symposium PS1
Sunday, 8:30-11:30, **Audimax**

Adaptation, Migration, Persistence, Extinction: New Insights from Past Climate Changes

Organizers:
Francisco Rodríguez-Sánchez,
Estación Biológica de Doñana, CSIC, Spain
David Nogués-Bravo,
Centre for Macroecology,
Evolution and Climate, Denmark

Climate change is one of the major threats to biodiversity at present. Species are expected to migrate, evolve, persist locally or go extinct in response to climate change, but after decades of research we are still struggling to predict which response(s) will be more likely across different taxa, whether species will be able to adapt or migrate at the required pace, or which taxa may be at higher risk of extinction. This puzzling situation is partly due to the inherent complexity and limited understanding of the processes involved, and to the scarcity of appropriate comparative data. However, climate has been changing incessantly along Earth's history: how did species respond to past climate changes? How much migration, extinction, persistence and extinction occurred, and which factors (if any) could explain the outcome in retrospect? How do biotic interactions affect species responses? Looking backwards can be a fruitful way to increase our understanding and hopefully improve our predictive ability. This symposium will seek answers to these pressing questions by investigating biodiversity responses to past climate changes. In particular, this symposium has three main aims: (i) provide a synthesis of current knowledge about biodiversity responses to past climate changes; (ii) highlight current unknowns and propose ways to expand our knowledge, and (iii) discuss how this retrospective knowledge can be used rigorously to improve forecasts of climate change impacts for the next decades.

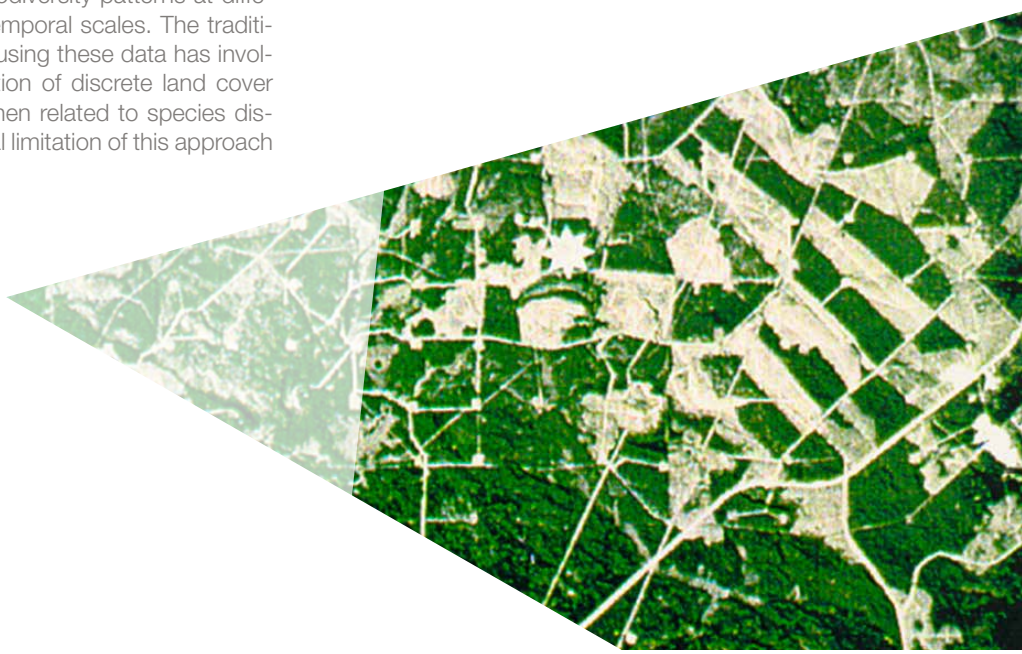
PS2

Plenary Symposium PS2
Friday, 12:15-15:45, **Audimax**

Tracking Changes from Space: Advances of Remote Sensing in Biogeography

Organizers:
Mao-Ning Tuanmu, Yale University, USA
Kate He, Murray State University, USA
Anna Cord, Helmholtz Centre for Environmental Research – UFZ, Germany

A key problem that biogeographers and ecologists have strived to understand is the spatial patterns and temporal dynamics of the biota. In this age of climatic and land use changes and rapid rates of species extinctions, such knowledge has become an essential component for management and conservation. The synoptic view provided by earth-imaging sensors constitutes an important source of information on the distribution of habitats and biodiversity patterns at different spatial and temporal scales. The traditional approach to using these data has involved the classification of discrete land cover types which are then related to species distributions. A critical limitation of this approach is that many important dynamics are obscured as the variance is lost within arbitrary land cover classes. In recent years, novel analytical techniques and open source software have been developed that more fully exploit the spatial, spectral and temporal information content of remotely sensed imagery in order to quantify a broader range of ecosystem characteristics. This symposium features advances in the synoptic assessment of species distributions and biodiversity patterns including the development of methodologies for assessment, monitoring, and modeling, as well as their implications for management and conservation.



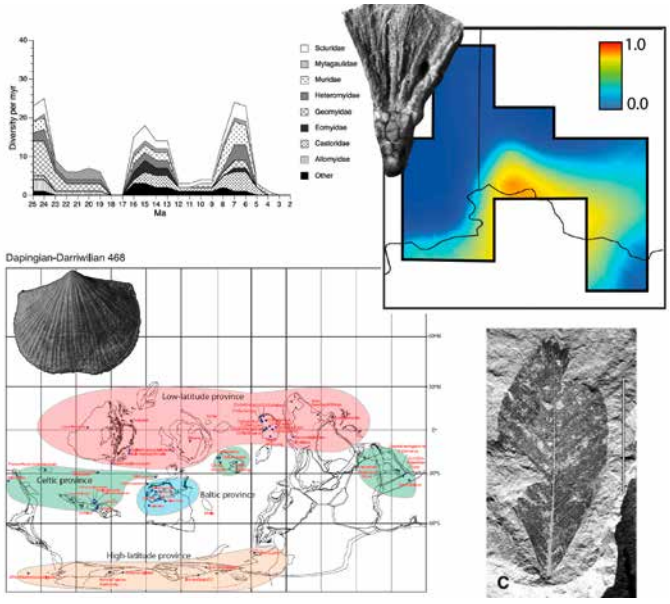
PS3

Plenary Symposium PS3
Saturday, 8:30-11:15, **Audimax**

Paleobiogeography: The Importance of Fossil Data to Species Biogeography Past, Present, and Future

Organizers:
Alycia Stigall, Ohio University, USA
Corinne Myers, Harvard University, USA

The fossil record is a rich source of data about the impact of environmental change on biotic systems. Whereas modern investigations can take a detailed look at how species respond to these changes, biologists are limited in temporal scope; i.e., studies may span decades, but species can persist for 2–10 Myrs. The fossil record provides a 544-Myr history illustrating how species have responded to environmental changes across their entire period of existence. However, paleontological data have not been fully integrated within many aspects of modern biogeographic theory.



The long temporal record preserved in the geological record provides an opportunity to explore the thousand-year or longer implications of changes observed in the modern world, such as global warming, sea level rise and fall, and species invasions. Utilization of Pleistocene and Quaternary fossils, notably fossil pollen, have resulted in innovative analyses and very significant interpretations, yet paleobiogeographic investigation into older parts of the fossil record are far less common. This under-utilization partly reflects methodological challenges (e.g., lack of, or inaccuracy in, climate models extending to deep time) and partly an historical expectation that detailed analyses were precluded by incompleteness in the fossil record. Both of these limitations have been mitigated over the past several decades. Recent efforts in stratigraphic correlation via sequence stratigraphy and global correlation efforts have provided a robust and detailed temporal framework for analysis in many time intervals. Furthermore, many "modern" biogeographic methods, such as species distribution modeling and phylogenetic biogeographic methods, have been adapted for use with fossil data. These advances provide a framework within which an unprecedented level of synthesis may be achieved between paleo— and neo—biogeography. This symposium will highlight those linkages, quantitative techniques, and the novel interpretations that can arise from such analyses.

PS4

Plenary Symposium PS4
Friday, 9:15-11:45, **Audimax**

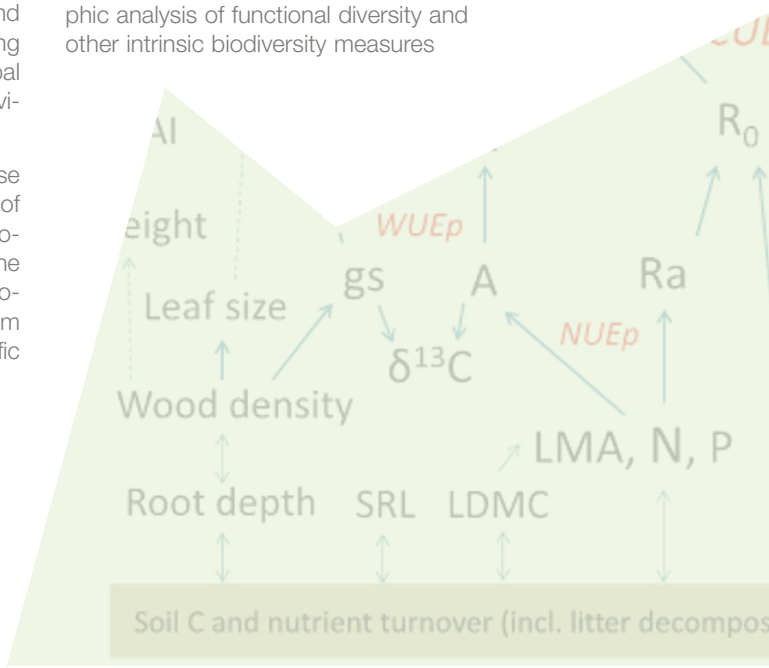
Global Functional Diversity in a Data-Rich Era

Organizers:
Björn Reu, University of Leipzig, Germany
Miguel Mahecha, Max Planck Institute for Biogeochemistry, Jena, Germany
Jens Kattge, Max Planck Institute for Biogeochemistry, Jena, Germany
Christian Wirth, University of Leipzig, Germany; German Centre for Integrative Biodiversity Research (iDiv)

Identifying and quantifying the links between biogeographical patterns and ecosystem functioning at regional to global scales has not yet been sufficiently explored. However, these links, as mediated by the different characteristics of organisms (i.e. functional diversity), are key to understanding the role and vulnerability of biodiversity in a changing world and anticipate the impacts of global change on ecosystem functioning and services.

In this symposium we aim to address these issues with an emphasis on the drivers of functional diversity, the relevance of functional diversity for ecosystem functions, and the representation of functional diversity in ecosystem models. To do so, this symposium will highlight a broad spectrum of scientific approaches addressing:

- how functional diversity relates to niche processes
- how deep-time historical drivers may have shaped contemporary functional diversity and ecosystem functioning
- drivers of plant pollination systems and their diversity across Europe
- ecosystem modeling considering novel approaches to functional diversity
- evaluating the effect of functional diversity on growth and mortality across European forests
- methodological challenges for the geographic analysis of functional diversity and other intrinsic biodiversity measures



Timetable

Friday, 9.1.2015

Audimax

		Time
Bus Shuttle Hotels, Registration		8:00
Welcome Audimax		8:30
Opening Lecture *Helmut Schwarz* President of the Alexander von Humboldt Foundation *see page 4*		8:45
PS4 Plenary Symposium **Global Functional Diversity in a Data-Rich Era** *see page 9*	**PS4.1** *Robert Ricklefs* Traits, niche occupancy, coexistence, and geographic distribution **PS4.2** *Alejandro Ordonez et al.* Long-term historical effects on functional diversity and potential impacts on ecosystem functioning **PS4.3** *Aveliina Helm et al.* Large-scale distribution of pollination systems in Europe	9:15
Coffee Break		10:10
PS4 continued	**PS4.4** *Simon Scheiter et al.* Projecting traits, communities and functional diversity: novel approaches to ecosystem modeling **PS4.5** *P. Ruiz-Benito et al.* Does functional diversity modulate demographic responses to stand structure and climate in European forests? **PS4.6** *Bradford Hawkins et al.* Community diversity and structure in geographical space: the roles of functional diversity and all other intrinsic properties may be very challenging to evaluate	10:40
Break salty snacks		11:45
PS2 Plenary Symposium **Tracking Changes from Space: Advances of Remote Sensing in Biogeography** *see page 7*	**PS2.1** *Woody Turner* Remote sensing for biogeography: Networking our future **PS2.2** *Duccio Rocchini* Advances in estimating species diversity by remote sensing: a challenge for biogeography	12:15
Lunch Mensa		13:15

Time

14:15

Audimax

PS2 continued

PS2.3
Christine Wallis et al.
Benefits of multi-sensor remote sensing and image texture extraction for biodiversity mapping in the High Andes of Ecuador

PS2.4
Walter Jetz
Remote-sensing based prediction and monitoring of global species distributions

PS2.5
Bethany Bradley
Invaders from space: Remote sensing of invasive plants

PS2.6
Sebastian Schmidtlein
What you can't expect from remote sensing

15:45

Change of Building **Coffee Break** Foyer RW

16:15

Lightning Talks 1

P2	P3	PPS2, PPS4	P1
H21	H22	H24	H25

17:15

Poster Session 1 with food and drinks

Posters presented see page 18

RW

19:15

Bus shuttles depart to hotels

Friday

Timetable

Saturday, 10.1.2015

Time

Bus Shuttle Hotels, Registration — 8:00

Audimax

PS3
Plenary Symposium

Paleobiogeography: The Importance of Fossil Data to Species Biogeography Past, Present, and Future

see page 8

8:30

PS3.1
Alycia Stigall
Paleobiogeography: The importance of fossil data to species biogeography past, present, and future

PS3.2
Thomas Servais et al.
Origin of biogeography: 500 million years ago?

PS3.3
Wolfgang Kiessling et al.
Biogeographic structure of marine benthic assemblages over the last 300 Million years

PS3.4
Thomas Denk
Do we need fossils for historical biogeography?

Coffee Break — 10:00

PS3 continued — 10:30

PS3.5
Andrea Sánchez Meseguer et al.
Integrating fossils, phylogenies, and niche models into biogeography to reveal ancient evolutionary history: The case of *Hypericum* (Hypericaceae)

PS3.6
Catherine Badgley
Continental gateways and the dynamics of mammalian faunal change

MacArthur & Wilson Award Presentation and Lecture *see page 5* — 11:15

Lunch Mensa **Change of Building** — 12:00

Contributed Talks

13:00

CT2 H21 Climate-Change Biogeography
Chair: *Jessica Blois*

CT2.1
Christy McCain et al.
The importance of population variability to the accurate detection of climate change responses

13:15

CT2.2
Morgane Barbet-Massin et al.
Testing the "space-for-time" substitution in biodiversity modeling and projection

CT4 H22 Historical and Paleo-Biogeography
Chair: *Corinne Myers*

CT4.1
Hans Peter Linder et al.
Cenozoic palaeofloristic regionalization – dispersal barriers rather than global climates as drivers of global regionalization

CT4.2
S P Vijayakumar et al.
Born in the mountains: dominance of geological processes in the diversification of bush frogs in the Western Ghats Escarpment

CT1 H24 Island Biogeography
Chair: *Manuel Steinbauer*

CT1.1
Patrick Weigelt et al.
Global patterns and drivers of phylogenetic structure in island floras

CT1.2
Maria Novosolov et al.
The characteristics of population density in insular endemic lizards

CT3 H25 Gradients, Range Limits, and Beta Diversity
Chair: *Carl Beierkuhnlein*

CT3.1
Jonathan M. Chase
β-diversity is like a Siren's song: Conceptually beautiful but operationally deadly

CT3.2
David Nipperess
Putting evolutionary history on the map: finding the unique phylogenetic contribution to spatial patterns of biodiversity

RW

13:30	**CT2.3** *Ishan Agarwal et al.* Did montane refugia in peninsular India allow the persistence of mesic forest biota through Miocene climate change?	**CT4.3** *Nicholas Matzke* Bayesian stochastic mapping for estimating biogeographic history on phylogenies	**CT1.3** *Eleanor Velasquez et al.* Havre Pumice Rafts: A unique test of the theory of Island Biogeography	**CT3.3** *Even Tjørve* Which spatial patterns of species diversity overthrow Diamond's reserve-design rules?
13:45	**CT2.4** *Carlos E. González-Orozco et al.* Branches of the tree of life weakened under climate change	**CT4.4** *Jason Pither* Historical-biogeographical and evolutionary hypotheses for diversity-environment correlations among microbes	**CT1.4** *Anna Papadopoulou et al.* Species-specific responses to island connectivity cycles: refining the 'Pleistocene Aggregate Island Complex' (PAIC) model of diversification.	**CT3.4** *Laura Nunes et al.* A novel null biogeographical model to study ecological speciation
14:00	**CT2.5** *Corinne Myers et al.* Determining the evolutionary impact of biogeographic characters under climate change using simulation studies	**CT4.5** *Jens-Christian Svenning et al.* Late Cenozoic climate change and the phylogenetic structure of conifer assemblages worldwide	**CT1.5** *Jacob Esselstyn et al.* Diversification of Sulawesi's murid rodent fauna	**CT3.5** *Alessandro Chiarucci et al.* Biogeography is the major determinant of plant diversity in European forests
14:15	**CT2.6** *Qin Li et al.* Global patterns and attributions of non-analogous climate for terrestrial plants in the past and future	**CT4.6** *Judith Masters et al.* The red island and the seven dwarfs body size reduction in Cheirogaleidae	**CT1.6** *Jonathan Price et al.* Bioclimatic origins of the Hawaiian flora: niche conservatism or adaptive free-for-all?	**CT3.6** *Dirk N. Karger et al.* Unifying species pools in ecology and biogeography
14:30	**CT2.7** *Anja Jaeschke et al.* Including ecological constraints of pathogen and vector in modelling vector-borne diseases. Risk assessment for *Aedes albopictus* and Dengue	**CT4.7** *Susanne Renner et al.* No longer relying just on oldest fossils forced to specific nodes. The fossilized birth-death process illustrated in the worldwide fern family Osmundaceae	**CT1.7** *Robert Whittaker et al.* Functional island biogeography: from isolated trees to oceanic islands	**CT3.7** *Howard Cornell* How are regional species pools used in community ecology?
14:45	**CT2.8** *Antonello Provenzale et al.* From climate change to ecosystem response cross-scale interaction and the chain of uncertainties	**CT4.8** *Thomas A. Neubauer et al.* Establishing a paleobiogeographic framework for European Neogene freshwater systems	**CT1.8** *Rosemary Gillespie et al.:* Community dimensions of island biogeography	**CT3.8** *Ole R. Vetaas et al.* Principal factors controlling biodiversity water, energy and their interaction

RW

15:00 **Coffee Break**

15:30 **Lightning Talks 2**

P7, P12	P4, P8	P5	P6, P10, P11, P14
H21	H22	H24	H25

16:30 **Poster Session 2** with food and drinks *Posters presented see page 28*

18:30 **Shuttle transport to banquet location**

19:00 **Banquet Dinner Party**
see page 41

Saturday

Timetable

Sunday, 11.1.2015

Time

Bus Shuttle Hotels, Registration — 8:00

Audimax

PS1
Plenary Symposium

Adaptation, Migration, Persistence, Extinction: New Insights from Past Climate Changes

see page 6

8:30

PS1 Introduction
Francisco Rodríguez-Sánchez

PS1.1
Steve Jackson
The fossil record and the future: Using the past to assess climate-change vulnerability and adaptation

PS1.2
Hélène Morlon
Testing the effect of past climatic changes on biodiversity

PS1.3
Luisa Orsini
A revolutionary way to reconstruct evolutionary dynamics in nature over centuries

Coffee Break — 9:55

PS1 continued — 10:25

PS1.4
Damien Fordham
Reassessing extinction risk from anthropogenic climate change using fossils and molecular log books

PS1.5
Roland Jansson et al.
Stability begets diversification: effects of climatic stability on the diversification of birds in the New World

PS1.6
Erik J de Boer et al.
Ecosystem response to climate change in the tropical island of Mauritius, SW Indian Ocean

PS1 Conclusion
David Nogués-Bravo

Lunch / Student Discussion Groups Mensa — Change of Building — 11:30

13:00

CT5 H21 Conservation Biogeography
Chair: *Jan Axmacher*

CT5.1
Sebastien Villeger et al.
Spatial insurance of fish functional diversity across coral reefs

13:15

CT5.2
Werner Ulrich et al.
The interplay of competition and habitat selection determines the colonisation pattern of bird communities in small forest fragments …

CT8 H22 Quaternary and Cultural Legacies
Chair: *Daniel Gavin*

CT8.1
Henry Hooghiemstra et al.
Pleistocene oscillations and Anthropogene reduction of biome surface in the Andean and Indian Ocean tropics; …

CT8.2
Edward Davis et al.
Geospatial analysis of human-megafaunal overlap in North America

CT6 H24 Modelling Species and Ecosystems
Chair: *Francisco Rodríguez-Sánchez*

CT6.1
Thomas Hickler et al.
Modelling the coupled dynamics of large grazers, vegetation and fire across Africa

CT6.2
Manuela D'Amen et al.
New insights on the implementation of the SESAM framework

CT7 H25 Phylogeography
Chair: *Anna Papadopoulou*

CT7.1
Henrik Krehenwinkel et al.
The poleward range expansion of European populations of the wasp spider *Argiope bruennichi*

CT7.2
Orly Razgour et al.
Insights from the past into biodiversity responses to future climate change using bats as a model

RW

13:30	**CT5.3** *Laura Kehoe et al.* Global patterns of agricultural land use intensity and biodiversity	**CT8.3** *E. Vázquez-Domínguez et al.* The story of a rodent's Holocene extinction from the tropical Loltún cave, Yucatan, Mexico	**CT6.3** *Ignacio Morales-Castilla et al.* Using phylogeny to improve single species distribution models	**CT7.3** *Rafe Brown* UCE-primed sequence capture and the resolution of shallow divergences in cryptic species complexes…
13:45	**CT5.4** *Jenny McGuire et al.* How far can they go? Tracking climate across a fragmented landscape using climate corridors	**CT8.4** *Felisa Smith et al.* … The ecosystem consequences of the terminal Pleistocene Megafaunal Extinction	**CT6.4** *Petr Keil et al.* Multi-scale models for biogeography	**CT7.4** *Cecilia Banag et al.* Molecular phylogeny and biogeography of Philippine *Ixora* L. (Rubiaceae)
14:00	**CT5.5** *Thomas Matthews et al.* Habitat fragmentation and the species–area relationship	**CT8.5** *Milan Chytrý et al.* Refugium of the Late Pleistocene biota in the mountains of southern Siberia	**CT6.5** *Babak Naimi et al.* From geographical distributions to ecological niches and back	**CT7.5** *A. Florez-Rodriguez et al.* A step backwards to move forward Footprints of climate change on genetic populations dynamics
14:15	**CT5.6** *Ricardo Dobrovolski et al.* Habitat amount determines species' extinction risk threshold	**CT8.6** *Wolfgang Willner et al.* Floristic legacies of the Quaternary climate change: an example from European beech forests	**CT6.6** *Damaris Zurell et al.* Benchmarking range dynamic models with virtual community data	**CT7.6** *Hanna Tuomisto et al.* Diversification of neotropical ferns: some do it in Amazonia, others outside
14:30	**Break**			
14:45	**CT10** H21 **Invasions** Chair: *Bethany Bradley*	**CT12** H22 **Biodiversity Hotspots** Chair: *Jürgen Dengler*	**CT9** H24 **That Grand Subject** Chair: *Lawrence Heaney*	**CT11** H25 **Latitudinal Biodiversity Gradients** Chair: *Roland Jansson*
	CT10.1 *Marten Winter et al.* The global biogeography of alien plants in the Anthropocene: human legacy and future outlooks	**CT12.1** *Sushma Reddy et al.* Island and continental biogeography dynamics in the assembly of the Western Ghats (India) avifauna	**CT9.1** *Joaquin Hortal et al.* Mapping biogeographical ignorance	**CT11.1** *Jonathan Kennedy et al.* Into and out of the tropics the generation of the latitudinal gradient among New World passerine birds
15:00	**CT10.2** *Marc Rius et al.* Range expansions across ecoregions interactions of climate change, physio-logy and genetic diversity	**CT12.2** *Simon Loader* Temporal stability of Eastern Afromontane forests evidence from Amphibians and Reptiles	**CT9.2** *David J. Currie* On hypothesis testing in macroecology	**CT11.2** *Manuel Steinbauer et al.* Topography-driven isolation, speciation and global plant biodiversity
15:15	**CT10.3** *Céline Bellard et al.* Major drivers of invasion risks throughout the world	**CT12.3** *Jan Axmacher* Diverging diversity patterns in species-rich taxa – Implications for biodiversity conservation	**CT9.3** *Catherine Graham et al.* Deconstructing phylogenies: Phylogenetic scale in ecology and evolution	**CT11.3** *Véronique Boucher-Lalonde* Climatic tolerances and geographical patterns in species richness
15:30	**CT10.4** *Jennifer Firn et al.* Grasses and forbs respond similarly to eutrophication and vertebrate herbivory at sites home and away	**CT12.4** *Harry Seijmonsbergen et al.* Geodiversity, a novel predictor for biodiversity?	**CT9.4** *Mark V. Lomolino et al.* The silence of biogeography	**CT11.4** *Fabricio Villalobos et al.* Global patterns of mammalian coexistence phylogenetic and morphological structure within species ranges
15:45	**Change of Building** **Coffee Break** Audimax			

RW

Business Meeting 16:15

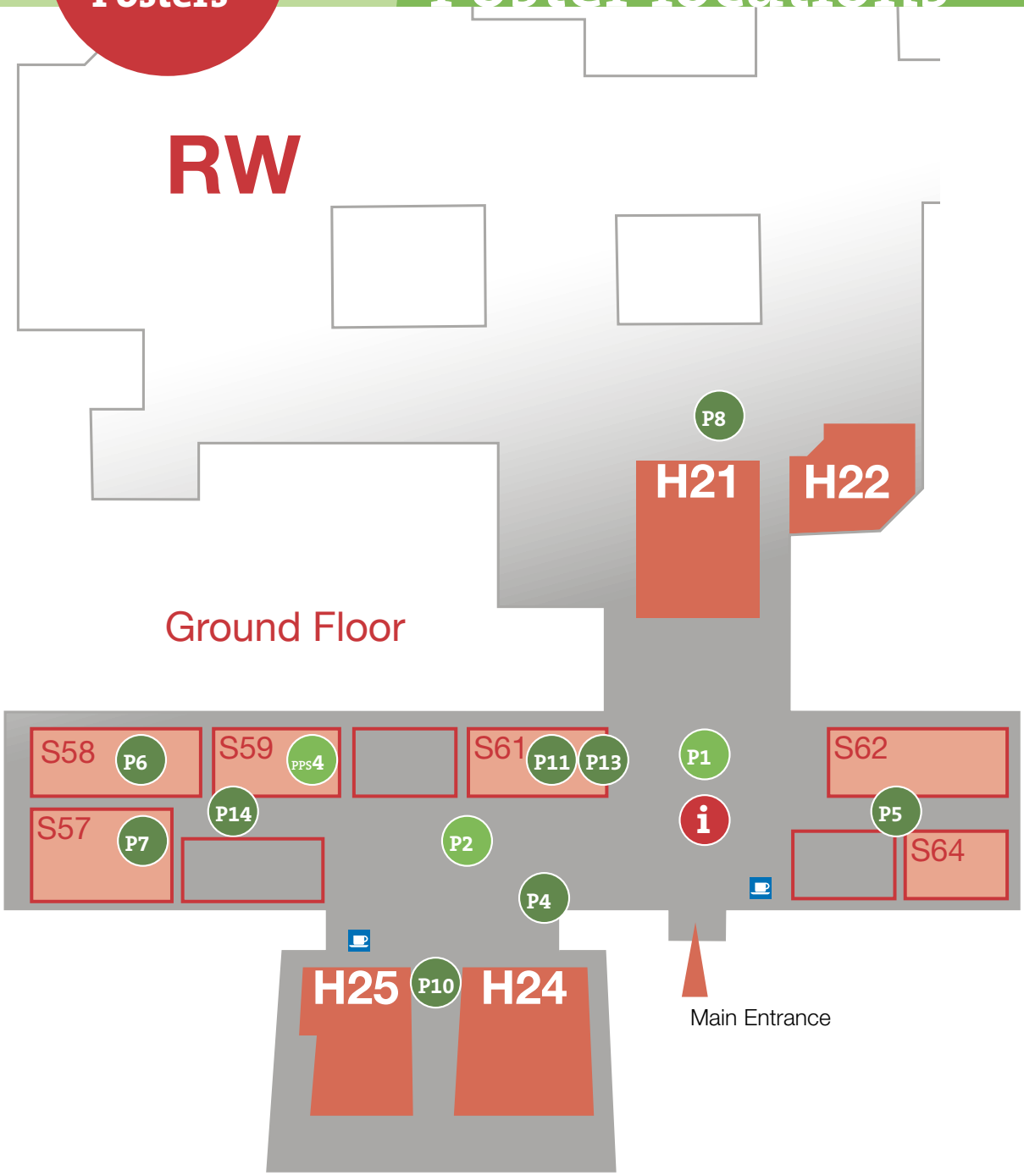
Audimax

Awards Ceremony and Wallace Award Lecture *see page 5* 16:30

Sunday

Posters

Poster locations



Poster Session 1

Friday, 17:15-19:15

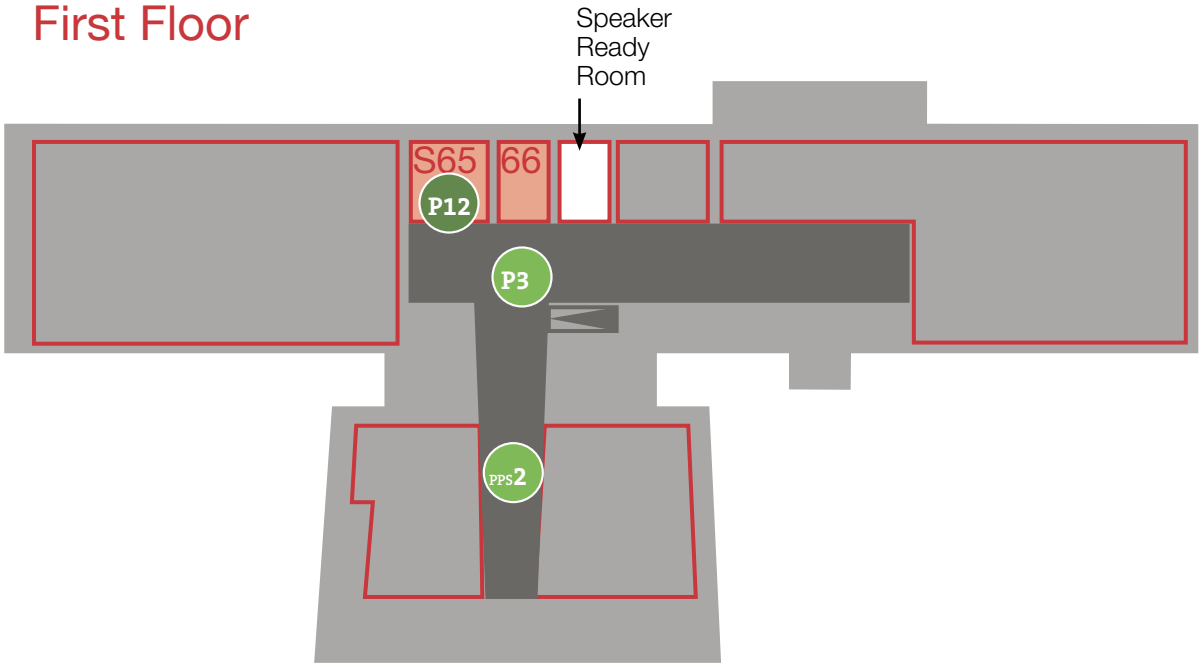
PPS2 PPS4 P1 P2 P3

Poster Session 2

Saturday, 16:30-18:30

P4 P5 P6 P7 P8 P10 P11 P12 P13 P14

First Floor



PPS2 Poster session 1

Friday, 9.1.2015

Tracking Changes from Space: Advances of Remote Sensing in Biogeography

Lightning Talks: 16:15-17:15, **RW H24**
Poster Session: 17:15-19:15, **Corridor South, First Floor**

PPS2.1
Anna Cord et al.
glUV: a global UV-B radiation data set for macroecological studies

PPS2.2
Palma Blonda et al.
(Semi-) Natural grasslands monitoring from multi-seasonal Very High Resolution Earth Observation data (WorldView2): achievemnts of the FP7 BIO_SOS project

PPS2.3
Caroline Curtis et al.
Using time series of remotely sensed imagery to understand the dispersal dynamics of invasive species

PPS2.4
Michael Douglas et al.
Artifacts in WORLDCLIM precipitation fields

PPS2.5
Fabian Fassnacht et al.
Assessing avian species richness in the eastern Tibetian Plateau with multi-scale remote sensing data

PPS2.6
Michelle Greve
Vegetation types at large spatial scales. Can we predict where they meet?

PPS2.7
Kate He et al.
Remote sensing to shape the next generation species distribution models

PPS2.8
Buho Hoshino et al.
Remote sensing approach for evaluating the invasion strategic of Mesquite *(Prosopis juliflora)* in Sub-Saharan Africa

PPS2.9
Emily Lines et al.
Assimilation of Remote Sensing Data for Land Surface Models

PPS2.10
Matteo Marcantonio et al.
Species distribution modelling of a new invasive mosquito in North East Italy: A Bayesian approach

PPS2.11
Katherine Mertes et al.
Evaluating scale-dependence in species-environment relationships

PPS2.12
Rasmus Revermann et al.
Using remotely sensed predictors for SDMs to explain distribution of canopy tree species of Miombo woodlands

PPS2.13
Kim André Vanselow et al.
Predictive mapping of dwarf shrub vegetation in an arid high mountain ecosystem using remote sensing and random forests

PPS2.14
Adam Wilson et al.
High-resolution global cloud dynamics for ecosystem and biodiversity monitoring

Authors available at Poster

Authors of posters with **odd** number will be present during the **first hour**, with **even** number during the **second hour** of the poster sessions for discussions.

PPS4

Global Functional Diversity in a Data-Rich Era

Lightning Talks: 16:15-17:15, **RW H24**
Poster Session: 17:15-19:15, **S59, Ground Floor**

PPS4.1
Leonor Alvarez-Cansino et al.
Seasonal differences in growth and leaf physiology between lianas and trees. A test of the dry season growth advantage hypothesis

PPS4.2
Matthias Dehling et al.
Functional relationships between interacting species across scales - from species interactions to regional patterns

PPS4.3
Hannes Feilhauer
A tale of bees and flowers – mapping pollination traits with imaging spectroscopy

PPS4.4
Vladimir Remes et al.
Global geographic patterns of sexual size dimorphism in birds and their climatic correlates

PPS4.5
Lucie Hemrova et al.
The importance of local dynamics and species' dispersal for species' potential to spread in landscape

PPS4.6
David Horák et al.
Relative food limitation drives geographic clutch size variation in South African passerines: a large-scale test of Ashmole's seasonality hypothesis

PPS4.7
Jens Kattge et al.
TRY – a global database of plant traits

PPS4.8
Christian Wirth et al.
Functional resilience towards climate-driven extinction - the trait signature of the European and North American tree floras.

PPS4.9
Girardello Marco et al.
Multi-million year climate change legacies in global mammal functional diversity patterns

PPS4.10
Shai Meiri et al.
Cold vegetarians live longer - on longevity and biogeography of reptiles

PPS4.11
Robert Muscarella et al.
Do community-mean trait values reflect optimal strategies? Insights from niche models of Puerto Rican trees.

PPS4.12
Oliver Purschke et al.
sPlot – the new global vegetation-plot database for addressing trait-environment relationships across the world's biomes

PPS4.13
Björn Reu et al.
Species physiological tolerances and ecological niche processes jointly shape regional-scale biodiversity gradients

PPS4.14
Bianca Saladin et al.
Biodiversity turnover along environmental and spatial gradients in Europe

PPS4.15
Franziska Schrodt et al.
Plant functional diversity effects on ecosystem resilience – linking traits and ecosystem functioning at the continental scale

PPS4.16
Irena Šímová et al.
Functional traits and global productivity gradient: can we predict ecosystem processes using plant assemblage composition?

PPS4.17
Mariana Tsianou et al.
Cross-function congruence of functional diversity patterns

PPS4.18
Jeferson Vizentin-Bugoni et al.
Processes entangling plant-hummingbird networks across space: how widespread is the importance of forbidden links in detriment of abundances?

poster showing this icon will be presented at the lightning talks

P1 Poster session 1

Friday, 9.1.2015

Island Biogeography

Lightning Talks: 16:15-17:15, **RW H25**
Poster Session: 17:15-19:15, **Corridor Center, Ground Floor**

P1.1
Marc S. Appelhans et al.
Age and distribution patterns of *Melicope* (Rutaceae) in the Pacific

P1.2
Paulo Borges et al.
Species abundance distributions (SADs) in different trophic groups accross archipelagos

P1.3
Francesc Mesquita-Joanes et al.
Species sorting in metacommunities of endorheic shallow lakes

P1.4
Michael Dawson et al.
Diversity, differentiation, and zonation of marine lake communities

P1.5
Diego Ellis Soto et al.
Wasted seed dispersal by Galapagos tortoises?

P1.6
Michal Ferenc et al.
Abundance-area relationships in passerines on Mt. Cameroon: montane forest species compensate for less space available

P1.7
Richard Field et al.
Biogeographic ranges not predicted by niche theory in radiating Canary Island plant genera

P1.8
Mauro Fois et al.
Spatial and environmental drivers of vascular plant richness across the islets of Sardinia

P1.9
Pauline Gauffre Autelin et al.
Biogeography of the high-spired planorbids (Gastropoda: Planorbidae) in Wallacea

P1.10
Elisavet Georgopoulou et al.
Biodiversity patterns of freshwater snails in European lakes

P1.11
Itamar Giladi et al.
Scale-dependent species–area relationships in a uniform habitat in fragmented Mediterranean grasslands.

P1.12
Severin D.H. Irl et al.
What drives range size differences of endemic plant species on an oceanic island?

P1.13
Yuval Itescu et al.
Body size evolution across insular populations of two Mediterranean lizards – playing by the rules?

P1.14
José María Fernández-Palacios et al.
Habitat history in subtropical oceanic island summit ecosystems, with special reference to the Canarian flora

P1.15
Paulina Kondraskov et al.
Historical Biogeography of selected Macaronesian Laurel forest species

P1.16
Christian König et al.
Assessing peculiarities of island biota: A global analysis of taxonomic and functional disharmony in vascular plants

P1.17
Christoph Kueffer et al.
Island biogeography: moving beyond species numbers

P1.18
Bernd Lenzner et al.
The general dynamic model of island biogeography revisited on the level of major plant families

P1.19
Jun Ying Lim et al.
Island ontogeny and the macroevolutionary dynamics of clades on oceanic islands: testing hypothesized diversity under and overshoots in Hawaii

poster showing this icon will be presented at the lightning talks

P1.20
Ye Liu et al.
The relationships between local abundance, range size and niche breadth of woody plant species in a mountain context

P1.21
Pavel Matos-Maravi
Endemic butterfly radiation on the Caribbean: insights from historical biogeography and phylogenetic diversification

P1.22
Alexandra Muellner-Riehl et al.
Origin, evolution, assembly and maintenance of biodiversity – local mechanisms and their effect on patterns of SE Asian plant diversity

P1.23
Luka Negoita et al.
A framework and experimental approach for testing the role of plant dispersal on ecosystem function

P1.24
Rui Nunes et al.
Testing neutral vs. niche species assembly in the canopy arthropod communities of the Azorean native forests

P1.25
Maria Panitsa et al.
Factors affecting chasmophytic plant species diversity and endemism on the habitat islands of rocky limestone slopes and cliffs in Greece.

P1.26
Jairo Patiño et al.
Approximate Bayesian Computation reveals the crucial role of oceanic islands for the assembly of continental biodiversity

P1.27
Robert Ricklefs et al.
Using genetic variation to infer the comparative demographic history of avian populations in the West Indies

P1.28
François Rigal et al.
Global patterns of diversification on oceanic islands

P1.29
Andy Rominger et al.
Macroevolutionary signals of insular adaptive radiations: Synthesizing across island systems with a novel statistical method

P1.30
Christina Schüßler et al.
Biogeography of Macaronesian-Mediterranean distributed Urticaceae

P1.31
Alex Slavenko et al.
Clutch size variability in an ostensibly fix-clutched lizard: effects of insularity on a Mediterranean gecko

P1.32
Claudia Speciale et al.
Aeolian Islands as an observatory for human-environment dynamics: resilience and reliance of prehistoric communities

P1.33
Joeri Sergej Strijk et al.
Patterns of colonization and diversification in the Western Indian Ocean: creating a phylogeographic synthesis

P1.34
Kostas Triantis et al.
Morphological and taxonomical diversity patterns of oceanic archipelagos

P1.35
Luis Valente et al.
A novel phylogenetic method for exploring the dynamics of island community assembly

P1.36
David Harter et al.
Island scale spatial and ecological differentiation within two species of a radiating genus on the Canary archipelago

P1.37
Patricia Wepfer et al.
The effect of historical land connectivity on ant species composition in the Japanese Archipelago

P2 Poster session 1

Friday, 9.1.2015

Climate-Change Biogeography

Lightning Talks: 16:15-17:15, **RW H21**
Poster Session: 17:15-19:15,
Corridor Center, Ground Floor

P2.1
Carlos Eduardo Arlé et al.
Assessing the exposure of *Hemitriccus mirandae* (AVES, Tyrannidae) to future climate change

P2.2
Maaike Bader et al.
Alpine treeline responses to experimental climate change: germination and seedling establishment

P2.3
Anne Bjorkman et al.
Climate adaptation is not enough: warming does not facilitate success of southern populations at northern latitudes in an Arctic tundra ecosystem

P2.4
Juergen Boehmer et al.
Dynamics of canopy dieback in the montane rainforest belt of a tropical volcanic island

P2.5
Filippo Botta et al.
Consequences of abrupt climate change on biodiversity

P2.6
Maria Brobrowski et al.
Modelling changing distribution ranges of *Betula utilis* in the Himalayan region under climate change conditions

P2.7
Viacheslav Kharuk
Climate induced “dark needle conifers” mortality in Siberia

P2.8
César Capinha et al.
Traits of European terrestrial gastropods indicate response to novel climates

P2.9
Ingolf Kühn et al.
The relationship of climate and land cover with vegetation phenology: a scale-specific analysis using wavelets across central Europe

P2.10
Cristiana Cerrato et al.
State and expected changes of animal biodiversity in the northwestern Italian Alps

P2.11
LuAnna L. Dobson et al.
The diversity and abundance of North American bird assemblages fail to track changing productivity

P2.12
Klara Dolos et al.
Estimating climate change impacts on forests: How does tree species distribution relate to tree growth and mortality?

P2.13
Milen Duarte et al.
Climate refugia and impacts of global climate change on threatened status of endemic plant species in southwestern South America

P2.14
Bettina Engelbrecht et al.
Drought as well as nutrients and herbivores shape tree distribution in tropical forests: implications under global climate change

P2.15
Alba Estrada et al.
What can life-history traits tell us about species’ ability to cope with climate change? A multi-taxon approach

P2.16
Gang Feng et al.
Plant endemism patterns across China are shaped by glacial-interglacial climate change

P2.17
Rui F. Fernandes et al.
Using models and connectivity analysis to predict current and future patterns of invasion in a transfrontier context – a case study of *Acacia dealbata* invasion in the Galicia-North of Portugal Euro-region

P2.18
Rosalina Gabriel et al.
Elevation gradients in islands: Variation in bryophyte community structure at different spatial scales

P2.19
Antonio González-Hernández et al.
Lean pattern in an altitude range shift of a tree species (*Abies pinsapo* Boiss.)

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P2.20
John-Arvid Grytnes et al.
Elevational shifts in plant communities is more pronounced at high elevations

P2.21
Laura Hernández et al.
Bioclimatic transition zones as bridges for migration of tree species under global change.

P2.22
Christian Hof et al.
The global variation of thermal tolerances: what can the integration of physiology and biogeography tell us about species' vulnerability to climate change?

P2.23
Emily Hollenbeck et al.
Elevational distributions of tropical epiphyte species indicate potential risk due to climate change

P2.24
Daniel Hornstein et al.
Characteristics of beech forests communities at their warm dry distribution limit

P2.25
Zheng Huaizhou et al.
Plant water-use strategies in serious soil erosion area: surviving the experimental drought

P2.26
Dave Jenkins
Terrestrial primary production scaling is unimodal and hierarchical

P2.27
Anke Jentsch et al.
Thresholds of European grassland resilience in the face of climatic extremes - The SIGNAL Experiment

P2.28
Imran Khaliq et al.
Endotherms in a warming world: limits to metabolic heat generation and phylogenetic constraints

P2.29
Robert Koch et al.
Spatial patterns of floristic richness and threatened plant species of Caatinga biome (Brazil) under climate change conditions

P2.30
Martin Kopecký et al.
Increasing precipitation buffers plant species against climate warming

P2.31
Frank La Sorte et al.
The implications of mid-latitude climate extremes for migratory birds

P2.32
Hongyan Liu et al.
How will climate change alter vegetation geography in the temperate steppe of China?

P2.33
Ziyu Ma et al.
Continental-scale phylogenetic assemblage patterns in angiosperm and gymnosperm trees across North America

P2.34
Andrey Malyshev et al.
Plant responses to climatic extremes: within-species variation equals among-species variation

P2.35
Aigi Margus
Temperature-size rule in insects: evidence from natural populations

P2.36
A.L. Márquez et al.
Broad-extent vs small extent distribution models: an alternative by updating broad-extent models with small-extent data

P2.37
Chunjing Qiu et al.
How does contemporary climate vs. climate change velocity affect endemic plant species richness in China?

P2.38
Viktoriia Radchuk et al.
Abrupt versus gradual environmental change: Effects on species adaptation

P2.39
George Roderick et al.
Berkeley Ecoinformatics Engine: Rescuing and integrating biological and environmental data in the face of global change

P2.40
Francisco Rodríguez-Sánchez et al.
SDM ensembles cannot overcome bias: caveats for inferring range dynamics

P2.41
Rut Sánchez de Dios et al.
Fagus sylvatica leading edge in North-Western Iberia: Holocene migration inertia, forest recovery and recent climate change

Poster session 1

Friday, 9.1.2015

P2.42
David Sánchez-Fernández et al.
The fate of deep subterranean biodiversity under climate change

P2.43
Udo Schickhoff et al.
Do Himalayan treelines respond to recent climate change? An evaluation of sensitivity indicators

P2.44
Andreas Schweiger et al.
How gradual warming, extreme weather and landscape interactively affect ecosystem processes

P2.45
Niels Schwab et al.
Near natural treeline ecotone, species patterns and species transitions influenced by soil factors in Rolwaling Himal, Nepal

P2.46
Andreas Schweiger et al.
Advantages on the dark side of insect colouration

P2.47
Valerie Steen et al.
Resilience of freshwater wetland habitats for migrating shorebirds under climate change

P2.48
Stephanie Kramer-Schadt et al.
Targeted conservation planning accounting for the effects of climate and land-cover change on Borneo's terrestrial mammals

P2.49
Shirin Taheri et al.
Have British birds extended northward?

P2.50
Nils Tjaden et al.
Defining risk zones for Chikungunya Fever in Europe: A biogeographical approach.

P2.51
Tiago Vasconcelos et al.
Potential climate-driven impacts on the distribution of generalist treefrogs in South America

P2.52
Carrie Wells et al.
Range collapse in the Diana fritillary, *Speyeria diana* (Nymphalidae)

P2.53
Marie Westover
Drivers of body size evolution in pikas (*Ochotona*) vary between taxonomic levels

P2.54
J. Eric Williams et al.
The effects of dispersal ability and climate velocity on the extent of species range shifts

P2.55
Yue Xu et al.
The exposure, sensitivity and vulnerability of natural vegetation in China to thermal climate variability (1901-2013): An multiple indicators-based approach

P2.56
Juliane Zenner et al.
Seasonal relationships of avian diversity with climate in Australia

P2.57
Dirk Zeuss et al.
Global warming favours light-coloured insects in Europe

P2.58
Constantin Zohner et al.
Does biogeographic origin influence leaf-out phenology?

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P3

Gradients, Range Limits, and Beta Diversity

Lightning Talks: 16:15-17:15, **RW H22**
Poster Session: 17:15-19:15,
Corridor Center, First Floor

P3.1
Abdulatif Alnafie
Boundaries of Saharo-Arabian and Sudanian regions in Saudi Arabia

P3.2
A. Márcia Barbosa
A fuzzy implementation of binary similarity indices for assessing biogeographic associations, biotic regions, and beta diversity

P3.3
Andrés Baselga et al.
The debate on beta diversity partitioning: linking measures to concepts

P3.4
Jan Beck et al.
Individualistic Gleasonian patterns in beta diversity prevail along elevational gradients

P3.5
Joanne. M Bennett et al.
Synthetizing Worldwide Ecology, Evolution and Physiology (sWEEP): Unifying marine and terrestrial biodiversity at the interplay of macroecology, macroevolution and macrophysiology

P3.6
Jessica Blois et al.
Biodiversity across varying environments: accumulation, loss, or stasis?

P3.7
Gunnar Brehm
Bergmann's rule applies but Rensch's rule does not: two species rich moth taxa along a Neotropical elevational gradient

P3.8
Chelsea Chisholm et al.
Species interactions across varying phylogenetic depths

P3.9
Alice Claßen et al.
Temperature versus resource constraints: which factors determine bee diversity on Mount Kilimanjaro (Tanzania)?

P3.10
Jean-Francois Cornu
Spatial distribution and diversity of parasites: macroscale estimations based on host-parasite inferences

P3.11
David Cowley et al.
A spatial analysis framework for population genetics in river networks

P3.12
Jessica Coyle et al.
Is environmental heterogeneity a driver of species richness at local and regional scales? A comparison of lichen families across North American forests

P3.13
Leonardo Dapporto et al.
Robust techniques for regionalization reveal historical and ecological fingerprints on species assemblages

P3.14
Christoph Digel et al.
Neutral species distributions yield non-random food webs

P3.15
Jan Divíšek
Towards spatial coherence of biogeographical regions

P3.16
Petr Dostál et al.
Phenotypic plasticity of Central European herbs is negatively related to niche breadth and commonness

P3.17
Stefan Ferger et al.
Effects of climate and land use on alpha and beta diversity of birds at Mt. Kilimanjaro

P3.18
Jose Antonio Gil-Delgado et al.
Flying plants and crustaceans: waterfowl as vectors of passively dispersing organisms in endorheic lakes

P3 cont.

Poster session 1

Friday, 9.1.2015

P3.19
Lenka Harmácková et al.
Species diversity, habitat and food specialisation in Australian birds

P3.20
Janin Hochheimer et al.
Competition may shape species ranges at global scales and forces regional extinction

P3.21
Marta Jarzyna et al.
Variation in fine-scale functional and phylogenetic diversity of assemblages: scale, detection, and multi-species models

P3.22
Michael Kessler et al.
Evolution of elevational diversity patterns

P3.23
David Kienle et al.
Mass elevation effect, continentality and isolation – drivers of global treeline elevation?

P3.24
Ching-Feng Li et al.
Does the number of species or individuals change along temperature and moisture gradients?

P3.25
Qin Li et al.
Spatial effects on niche evolution in *Mimulus*: climate to microhabitat

P3.26
Sabela Lois et al.
Biotic interactions in river networks: An example with the freshwater pearl mussel and its host fish.

P3.27
Ricardo Sawaya et al.
Geomorphological, climatic and spatial drivers of amphibian beta diversity in Atlantic Forest lowlands of southeastern Brazil

P3.28
Felix May et al.
The unification of unified biodiversity theories fails at predicting spatial patterns in a tropical forest

P3.29
Andreas Menzel et al.
Large-scale distribution patterns of arbuscular mycorrhizal and non-mycorrhizal plant species

P3.30
Naia Morueta-Holme et al.
Inferring species associations from occurrence data – a cautionary tale

P3.31
Zuzana Münzbergová et al.
Plant-soil feedback as potential factor driving distribution of dominant species in the landscape

P3.32
Jens Mutke et al.
Finescale latitudinal and altitudinal patterns of selected Andean plant genera at the continental scale

P3.33
Jens Oldeland et al.
Large extent and small grain monitoring data provide new insights into scale-dependent plant diversity patterns in southern Africa

P3.34
David Ott et al.
Unifying elemental stoichiometry and metabolic theory in predicting species abundances

P3.35
Marcell Peters et al.
Patterns and predictors of biodiversity at Mt. Kilimanjaro across taxa

P3.36
Gwendolyn Peyre et al.
Large-scale patterns of variation in species richness in the Páramo region and its environmental determinants

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P3.37
Samuel Pironon et al.
The “centre-periphery hypothesis”: a biogeographical paradigm revisited

P3.38
Kalle Ruokolainen et al.
Response shapes of dominant and subdominant plant species in Amazonian rain forests

P3.39
Zehao Shen et al.
Comparison of altitudinal patterns of plant diversity between East Himalaya and Taiwan Island: determinants and linkage

P3.40
Xingfeng Si et al.
Partitioning beta diversity into turnover and nestedness components in assemblages of breeding birds and lizards on inundated land-bridge islands

P3.41
Even Tjørve et al.
Which spatial patterns do the indices actually measure, and which indices measure the same thing? – Systemizing measures that compare species compositions in areas and linking them to spatial phenomena

P3.42
Arnošt L. Šizling et al.
Invariances and non-invariances in biogeography and macroecology: Looking for fundamental scales

P3.43
Tim Szewczyk et al.
Testing diversity hypotheses: A global analysis of ant diversity across elevations

P3.44
Krishnapriya Tamma et al.
Exploring the drivers of mammalian diversity patterns in the Himalayas

P3.45
Claire Teitelbaum et al.
Environmental determinants of migration distances of large mammalian herbivores

P3.46
Timothy Thrippleton et al.
Impact of herbaceous vegetation on post-disturbance forest dynamics – effects across an elevation gradient

P3.47
Benedikt Wiggering et al.
Regions, Range and Redundancy – Correlating chorology and taxonomy in marine gastropods

P4 Poster session 2

Saturday, 10.1.2015

Historical and Paleo-Biogeography

Lightning Talks: 15:30-16:30, **RW H22**
Poster Session: 16:30-18:30,
Corridor South, Ground Floor

P4.1
Ellie Armstrong et al.
Rarity, niche differentiation and species formation in Hawaiian Philodromid spiders

P4.2
Dennise Stefan Bauer et al.
Dated phylogeny and biogeography of the genus *Selaginella*

P4.3
Jovani B. de Souza Pereira et al.
The lycophyte genus *Isoetes* from South America: evidence to Understanding its Evolution

P4.4
Michael Borregaard et al.
Node-based analysis of species distributions

P4.5
Plauto Carvalho
Miocene divergent species lineages contributed to high levels of species diversity in the Atlantic Forest and Cerrado biomes of South America.

P4.6
Julien Clavel
Impact of the Mio-Pliocene Messinian salinity crisis on large mammals

P4.7
J. Ebersbach et al.
Saxifraga L. on a cold tin roof: diversification and biogeography on the Qinghai-Tibetan Plateau and beyond

P4.8
Georg Fischer et al.
Colonization and radiation of the hyperdiverse ant genus *Pheidole* in Madagascar

P4.9
Susanne Fritz et al.
Fossil mammalian diversity has tracked primary productivity over 20 million years

P4.10
Andrés Baselga et al.
Niche divergence drives diversification in vertebrate clades

P4.11
Jahnavi Joshi et al.
Cretaceous–Tertiary diversification among select Scolopendrid centipedes of South India

P4.12
Michelle Lawing et al.
Including fossils in phylogenetic climate reconstructions: a deep time perspective on the climatic niche evolution and diversification of Spiny Lizards (*Sceloporus*)

P4.13
Ingo Michalak et al.
Challenging disjunctions across the globe: the biogeographic history of Nartheciaceae

P4.14
Rasmus Østergaard Pedersen et al.
Improved phylogeny integrated estimates of abundance and their potential uses in macroecology

P4.15
Liliana Davalos et al.
The elusive case for neotropical refugia

P4.16
Patrick Strutzenberger et al.
Colonization and diversification patterns of passerine birds at the margins and in the centre of the Qinghai-Tibetan Plateau

P4.17
Mike Thiv et al.
Islands as refugia? - Are Macaronesian laurel forests ‚Tertiary' relicts?

P4.18
Dieter Thomas Tietze et al.
Does evolution of habitat niche in tits (Aves: Paridae) follow distributional range shifts?

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P5

Conservation Biogeography

Lightning Talks: 15:30-16:30, **RW H24**
Poster Session: 16:30-18:30,
Corridor East, S62, S64, Ground Floor

P5.1
Seda Akkurt et al.
Karasu dune vegetation (N Turkey), importance and conservation problems

P5.2
Janne Alahuhta et al.
Determinants of aquatic macrophyte floras across North America

P5.3
Camille Albouy et al.
Vulnerability of marine mammals to projected climate change: potential consequences for the phylogenetic and functional components of biodiversity

P5.4
Elina Aletrari et al.
Assessing plant species ranges against the degree of human impact

P5.5
Harriet Allen et al.
Mediterranean wood pastures for biodiversity – making the lynx

P5.6
Jenica Allen et al.
Plant invasion hotspots in the contiguous United States

P5.7
Joseph Bailey et al.
Advancing biodiversity modelling using geodiversity information

P5.8
Andrew Barnes et al.
Consequences of tropical land use for multitrophic biodiversity and ecosystem functioning

P5.9
Patrice Betz et al.
Effects of anthropogenic and environmental factors on the range contraction of North American bird and mammal species

P5.10
Benjamin Bleyhl et al.
Potential European bison habitat in the Caucasus

P5.11
Nina Curcic et al.
The Pseudoscorpions of Montenegro - an overview and conservation status

P5.12
Jens Dauber
Energy crops, neglected players in the 'land sparing vs. land sharing' debate

P5.13
Rafael De Camargo et al.
An empirical investigation of why species-area relationships overestimate species losses

P5.14
Kristen Denninger Snyder
Setting the stage for common hippo (*Hippopotamus amphibius*) conservation: rationale and priorities

P5.15
Felipe Domínguez Lozano
The role of species by family shares in biogeographical and conservation patterns in old versus new biotas

P5.16
Joaquin Duque Lazo et al.
Transferability of species distribution models: the case of *Phytophthora cinnamomi* in southwest Spain and southwest Australia

P5.17
Stefan Lötters et al.
How does UV-B radiation perform in predicting alien reptile invasions?

P5.18
David Goldblum et al.
Spatial modeling of tree species diversity in eastern North America using geographically weighted regression

P5.19
Sidney Gouveia et al.
Maintaining current forests would still lead to reduced landscape conditions for eastern titi monkeys following climate change

P5.20
Ingo Hahn et al.
Tsunami impact on the population development of a critically endangered bird species in a island ecosystem

P5 cont.

Poster session 2

Saturday, 10.1.2015

P5.21
Marwa Halmy et al.
Predicting the potential distribution of the critically endangered *Medemia argun* using remotely sensed data

P5.22
Jani Heino et al.
Phylogenetic diversity of regional beetle faunas at high latitudes: geographical patterns and ecological drivers

P5.23
Marcellinus Hula
Analysis of mangrove forest distribution change using remote sensing and GIS from 1986-2006 in Akwa Ibom State, Nigeria

P5.24
Tobias Kuemmerle et al.
Mapping reindeer calving grounds across the Russian Arctic

P5.25
Buntarou Kusumoto et al.
Spatial mismatches between biodiversity hotspots and protected area in Japan: process-based assessment of biases in conservation planning

P5.26
Emma Ladouceur et al.
A bio-geographical approach to species selection for restoration projects in the grasslands of the Atlantic and alpine bioregions of Europe

P5.27
Flavia Landucci et al.
The WetVegEurope project: a formalized vegetation-based typology of European aquatic and wetland habitats as a tool for biogeography and nature conservation

P5.28
Kirsti Leinonen et al.
How well can catchment productivity be used as a proxy of stream biodiversity at high latitudes?

P5.29
Zemagho Mbouzang Lise Arlette et al.
Distribution patterns of Anisophyllous *Sabicea* (Sabiceeae, Rubiaceae) in Continental Africa

P5.30
Shannon McCarragher et al.
The role of Amur honeysuckle encroachment in the white oak regeneration and recruitment gap: modeling seasonal carbon gain in a midwest tall-grass oak savanna restoration at Nachusa Grasslands, Illinois, USA

P5.31
Carsten Meyer et al.
Global determinants of species distribution knowledge across taxa and spatial scales

P5.32
Anna Lena Müller et al.
Visitation of the energy plant *Silphium perfoliatum* L. (Asteraceae) by hoverflies (Diptera: Syrphidae) in landscapes of different farming intensity

P5.33
Antonio Román Muñoz et al.
Biogeographical interactions of ecologically related species using fuzzy logic: is the endangered Egyptian Vulture being affected by the abundant Griffon Vulture?

P5.34
Jorge Ari Noriega et al.
Analysis of the biogeographic distribution patterns of the scarab beetle tribe Phanaeini in Colombia (Coleoptera: Scarabaeinae)

P5.35
Jonas Nüchel et al.
Species distribution modeling of snub-nosed monkey

P5.36
Ella Vázquez-Domínguez et al.
Extensive and rapid hybridization between *Crocodylus moreletii* and *C. acutus* throughout their distribution along the Gulf of Mexico and the Caribbean

P5.37
Josep Padullés
Plant richness and composition of urban domestic gardens are strongly related to socioeconomic and demographic characteristics of their owners in touristic residential areas of the Costa Brava (SPAIN)

P5.38
Salza Palpurina et al.
Eurasian temperate grasslands: a consistent soil pH optimum for fine-scale species richness across biogeographical regions

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P5.39
Luciano Pataro et al.
New insights in European pteridophyte distribution patterns

P5.40
Hannah Perkins et al.
Projecting the spread of a large carnivorous reptile

P5.41
Maria Piquer-Rodriguez et al.
Exploring policy options to curb future deforestation in the Argentine Chaco

P5.42
Ludmila Rattis et al.
Measuring range-wide carrying capacity and connectivity within species' geographic distribution providing their conservation status diagnosis

P5.43
Raimundo Real et al.
The geography of bushmeat hunting sustainability in central Africa: integrating biodiversity protection and human nutrition

P5.44
Yuri Rocha et al.
Urban flora of São Paulo city, Brazil: Data from an education project

P5.45
Alexander Rockinger et al.
Does rarity leave a footprint in herbarium material? A case study in Bavaria

P5.46
Liina Saar et al.
Plant extinctions and colonizations in European grasslands due to loss of habitat area and quality: a meta-analysis

P5.47
Yuri Rocha et al.
Conservation areas in private properties, Paraná State, Brazil

P5.48
Thomas Schmitt et al.
Effects of recent and past climatic shifts on the range dynamics and genetic structure of the high mountain Yellow-spotted ringlet butterfly (Lepidoptera, Satyrinae): a conservation problem

P5.49
Stephanie Shooner et al.
Elucidating patterns of diversity and phylogenetic structure in the Eastern Himalayas.

P5.50
Anika Sieber et al.
Effects of post-Soviet land-use change on large mammals' habitat in European Russia

P5.51
Andre Silva et al.
Mapping the occurrence of small cats in India: co-occurrence in *Prionailurus* spp.

P5.53
Jiri Smid et al.
Assessment of the diversity and distribution of the lizards of Iran at different geographic and taxonomic scales

P5.54
Kostas A. Triantis et al.
Drivers of extinction:
the case of Azorean beetles

P5.55
Johanna Toivonen et al.
Terrain features shaping the spatial distribution patterns of *Polylepis* forest stands in the high Andes of southern Peru

P5.56
Katri Tolonen et al.
Deconstructing trait patterns of stream macroinvertebrate communities at high latitudes

P5.57
Emanuel Rocchia et al.
Monitoring of biodiversity in the Italian Alps: a multi-taxa approach

P5.58
Jessica Weyer et al.
Dispersal capability is a major determinant of the genetic population structure of two wetland insects

P5.59
John Young et al.
Assessing the genetic diversity, distribution, and population status of American ginseng (*Panax quinquefolius*) in the eastern U.S.

P6 Poster session 2

Saturday, 10.1.2015

Modelling Species and Ecosystems

Lightning Talks: 15:30-16:30, **RW H25**
Poster Session: 16:30-18:30, **S58, Ground Floor**

P6.1
Babak Naimi et al.
sdm: an extendable R framework for species distribution modelling

P6.2
Edith Calixto-Perez et al.
Quantification of uncertainty of ecological niche models

P6.3
Ben Carlson
The effects of scale, data type and sample size on occurrence-based characterization of species environmental niches

P6.4
Valeria Di Cola et al.
Evaluation of SDM with a biological approach: How realistic or how ecologically meaningful is the model?

P6.5
Antoine Guisan et al.
ecospat: a miscellaneous R package for spatial analyses and modelling of species niches and distributions

P6.6
Maria Hällfors et al.
Implications for conservation decisions of modeling populations versus species under climate change

P6.7
Norbert Kühl et al.
On the universality of plant-climate relationships

P6.8
Boris Leroy et al.
Testing species distribution modelling techniques and hypotheses with virtual species: the 'virtualspecies' R package

P6.9
Xueyan Li et al.
Data uncertainty confuse richness patterns and ecological gradient drivers.

P6.10
Kaitlin Clare Maguire et al.
Community level models outperform traditional species distribution models

P6.11
Brezo Martínez et al.
Combining knowledge on intraspecific variation of thermal niches to species distribution models in geographical projections under climate change

P6.12
Aidin Niamir
The importance of absences in species distribution modelling

P6.13
Diego Nieto-Lugilde et al.
Improving species distribution model transferability by incorporating co-occurrence patterns and the fossil record

P6.14
Juliano Sarmento Cabral et al.
From population dynamics to biogeography: a mechanistic model unifying ecological, evolutionary and environmental processes

P6.15
Darius Stiels et al.
Are seasonal niches in migratory birds conservative or divergent? Niche evolution in Nearctic *Oreothlypis* warblers

P6.16
Mao-Ning Tuanmu et al.
A global remote sensing-based characterization of terrestrial habitat heterogeneity for biodiversity and ecosystem modeling

P6.17
Matthew H. Van Dam et al.
Environmental niche trackers and niche adapters revealed through fine scale phenological niche modeling

P6.18
Bruno Vilela et al.
letsR: a new R package for data handling and analysis in macroecology

P6.19
Jennifer Weaver et al.
Comparing single-species, co-occurrence and joint species distribution model predictions for invasive pollinators and plants

P6.20
David Zelený et al.
Variation in species composition explained by spatially autocorrelated environmental variables

P7

Phylogeography

Lightning Talks: 15:30-16:30, **RW H21**
Poster Session: 16:30-18:30,
S57, Ground Floor

P7.1
Kwaku Aduse-Poku
Spectacular radiation of Mycalesina butterflies in the old world tropics

P7.2
Ana Catarina A. Silva et al.
Phylogeography of two closely related skink species with different climatic niche breadth in Australia

P7.3
Laura Bertola et al.
Phylogeographic patterns in Africa and high resolution delineation of genetic clades in the African lion

P7.4
Gabriela Bittencourt-Silva et al.
Combining phylogeny and niche models to unravel the biogeographic history of the shovel-footed squeaker

P7.5
Guillaume Chomicki et al.
Biogeographic patterns underlying the increasing specialization or loss of symbiotic association between ant and plants

P7.6
David García Vázquez et al.
The Mediterranean peninsulas and central Asia were both post-glacial colonization sources for the widespread European species of water beetles

P7.7
Paolo Gratton et al.
A phylogeographic synthesis for Sub-Saharan Africa

P7.8
Jennafer Hamlin et al.
Distribution models and a dated phylogeny for the Louisiana irises

P7.9
David Harter et al.
Holocene re-colonisation, central-marginal-distribution and habitat specialisation shape population genetic patterns within an Atlantic European grass species

P7.10
Conor Meade et al.
The British-Irish Ice sheet at the end of the LGM: tabula rasa? Perhaps not

P7.11
Anna K. Hundsdoerfer et al.
Museum archives revisited: Biogeographic discoveries in brain-teasing high elevation *Hyles* (Lepidoptera: Sphingidae)

P7.12
Carolin Kindler et al.
Implications of phylogeography and population genetics for the taxonomy of grass snakes (*Natrix natrix*)

P7.13
Matthias Kropf et al.
Performance of steppe plants in Central Europe – a comparative analysis of four steppe species based on fruit set and germination data

P7.14
Sen Li et al.
Genetic variation reveals large-scale population expansion and migration during the expansion of Bantu-speaking peoples

P7.15
Sigrid Liede-Schumann et al.
Going West – a subtropical lineage (*Vincetoxicum*, Apocynaceae: Asclepiadoideae) expanding into Europe

P7.16
Katharine Marske et al.
Climate change, phylogeography and the future of genetic diversity

P7.17
Thomas Mutton et al.
Phylogeography and evolution of the Australian marsupial genus *Antechinus*

P7.18
Sarah Noben et al.
Biogeographic and phylogenetic analysis of the tree fern family Dicksoniaceae (Cyatheales)

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P7.19
Kristina Plenk et al.
Genetic variation of steppe plants in Central Europe – a comparative analysis of four steppe species based on AFLPs and cpDNA sequence data

P7.20
Nikolaos Psonis et al.
Investigating the phylogeography and population structure of *Podarcis tauricus* group

P7.21
V.V. Robin et al.
Deep and wide valleys drive nested phylogeographic impacts across an entire montane bird community

P7.22
Amy Runck et al.
Repeatability of patterns of hybridization after post-glacial contact of *Myodes rutilus* and *M. gapperi*

P7.23
Lauren M. Schiebelhut et al.
Correlates of gene flow in terrestrial and marine environments

P7.24
Gerald M. Schneeweiss et al.
The role of ecogeographic isolation in the diversification of alpine *Androsace* (Primulaceae)

P7.25
Peter Schönswetter et al.
Spatiotemporal diversification of Balkan biota

P7.26
M.J. Serra Varela et al.
Connecting environmental, genetic and geographical distances: A case study of maritime pine

P7.27
Lynika Strozier et al.
Cryptic diversification on widespread species in Madagascar

P7.28
Karin Tamar et al.
Biogeography of the genus *Acanthodactylus* Fitzinger, 1834

P7.29
Melita Vamberger et al.
Differences in gene flow in a twofold secondary contact zone of pond turtles in southern Italy (Testudines: Emydidae: *Emys orbicularis galloitalica, E. o. hellenica, E. trinacris*)

P7.30
Michael Veith et al.
How to survive past climate changes - lessons from *Lyciasalamandra*

P7.31
Christophe Vieira et al.
Phylogeography and speciation of the brown algal genus *Lobophora* (Dictyotales, Phaeophyceae)

P7.32
Beatriz Vigalondo et al.
Orthotrichum shevockii, another moss species displaying the rare biogeographic disjunction California-Macaronesia?

poster showing this icon will be presented at the lightning talks

P8 Poster session 2

Saturday, 10.1.2015

Quaternary and Cultural Legacies

Lightning Talks: 15:30-16:30, **RW H22**
Poster Session: 16:30-18:30,
Between H21 and H22, Ground Floor

P8.1
Vojtech Abraham et al.
Natural species distribution inferred from pollen-based quantitative land-cover reconstruction

P8.2
Meghan Balk et al.
Asymmetrical responses of woodrats (*Neotoma* sp.) across their range to late Quaternary climate

P8.3
Carl Beierkuhnlein et al.
Reconstructing the environment and climate of NE-Africa in the Holocene based on records of animals in ancient Egyptian Art

P8.4
Blas M. Benito et al.
Reconstructing the geographic distribution and ecological niche of Neanderthals during Oxygen Isotope Stage 5e (~125 ka BP)

P8.5
José María Fernández-Palacios et al.
Holocene vegetation dynamics in the island of Gran Canaria: new palaeoecological evidences

P8.6
Søren Faurby et al.
Historic and prehistoric extinctions have reshaped global mammal diversity patterns

P8.7
Daniel G. Gavin
Endemism-stability association on the Olympic Peninsula, Washington, assessed from palynological records

P8.8
Konstantinos Giampoudakis et al.
Niche dynamics of Early Modern Humans in the Palearctic reveal south Siberian dispersal route

P8.9
Bastian Göldel et al.
Geographic variation and environmental correlates of functional trait distributions in Neotropical palms (Arecaceae)

P8.10
Franziska Hoppe et al.
Degradation of pastoral resources in the Kyrgyz republic under post-Soviet transformation

P8.11
Ivan Horacek
Paleobiogeography of the Pleistocene/ Holocene transition in Central Europe: small mammals in a high-resolution fossil record

P8.12
Michal Horsák et al.
Central European fen mollusc and plant assemblages in modern and quaternary perspective

P8.13
Veronika Horsáková et al.
Endangered molluscs of European fens: current data and conservation of glacial relicts

P8.14
Sonja Knapp et al.
The legacy and future of phylogenetic diversity in urbanizing areas

P8.15
Oliver Korch et al.
Flora and vegetation dynamics on the Zugspitzplatt (Bavarian Alps, Germany)

P8.16
Sandra Nogué et al.
How dynamic are tropical forests? Long term human impact drives landscape „hyperdynamism" in an ancient tropical forest

P8.17
Frédérik Saltré et al.
A high-quality fossil database for addressing causes of Australian megafauna extinctions

P8.18
Frédérik Saltré et al.
Spatial pattern of Eurasian woolly mammoth extinctions during the Late Pleistocene based on statistical inference from fossil records

P8.19
Francesco Spada et al.
Biome affinities of local floras: on the phytogeography of *Quercus pubescens* willd. in Italy

P8.20
Philipp Stojakowits et al.
Reconstructing the paleoenvironment of the western German Alpine Foreland – a high resolution 14C-dated pollen diagram from the Mehlblockmoos (Allgäu, Bavaria)

P10

Invasions

Lightning Talks: 15:30-16:30, **RW H25**
Poster Session: 16:30-18:30,
Between H24 and H25, Ground Floor

P8.21
Carolina Tovar et al.
Marantaceae forest and mixed forest: two alternative stable states in central Africa?

P8.22
Sara Varela
General introduction to paleobioDB, an rOpenSci R-package to get fossil data for research

P8.23
Raluca Voda et al.
Biodiversity loss in the Maltese islands hits relictual species

P8.24
John Williams et al.
The effect of historic land use and climate change on taxa-climate relationships for major tree genera in northeastern US forests

P8.25
Xuefei Yang et al.
From past to future: ecological, spatial divergence and range dynamics of *Halenia* in China

P10.1
Mohammed Abu Sayed Arfin Khan et al.
Seedling emergence of invasive plants is limited by low temperature and humidity in experimental target-climate and can be predicted by climate of native and non-native origin

P10.2
Songlin Fei et al.
Macroscale invasion patterns and processes

P10.3
Laure Gallien et al.
The legacy of biogeography and evolutionary history explains pine invasiveness

P10.4
Qinfeng Guo
Invasion biogeography: comprehensive information from native ranges is needed

P10.5
Xuan Liu et al.
Conservatism of realized climatic niches among herpetofaunal invaders

P10.6
Julie Sheard
Rosa rugosa: differences between native and invasive ranges

P10.7
Stephanie Thomas et al.
The invasive vector mosquito *Aedes japonicus* in Europe: Still no end in sight!

P10.8
Jennifer Firn et al.
Influences of land management and exotic weed invasion on grassland seedbank diversity

P10.9
Aurèle Toussaint et al.
Taxonomic and functional diversity of freshwater fish accross the world

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P11 Poster session 2

Saturday, 10.1.2015

Latitudinal Biodiversity Gradients

Lightning Talks: 15:30-16:30, **RW H25**
Poster Session: 16:30-18:30,
S61, Ground Floor

P11.1
Hercules Araclides et al.
A phylogenetic approach to detecting competition in a global dataset

P11.2
Carlos E. González-Orozco et al.
Francisco José de Caldas: a missing link in the origins of phytogeography

P11.3
Evan Economo et al.
Global patterns of diversity and diversification in ants

P11.4
Kristine Engemann et al.
Origin of the latitudinal species richness gradient in the New World

P11.5
Trevor Fristoe
The contribution of migrants to diversity and energy use in North American bird communities across the seasons

P11.6
John Grady et al.
Why endotherms dominate cold, productive oceans

P11.7
Lenka Kopsová et al.
Migration mode influences geographical patterns in clutch size of European Passerines

P11.8
Antonin Machac et al.
Global dynamics of mammalian diversity

P11.9
Caterina Penone et al.
Exploring mechanisms underlying global mammal beta-diversity patterns

P11.10
Anke Stein et al.
Differential effects of environmental heterogeneity on global mammal species richness

P12 Poster session 2

Saturday, 10.1.2015

Biodiversity Hotspots

Lightning Talks: 15:30-16:30, **RW H21**
Poster Session: 16:30-18:30, **S65, S66, First Floor**

P12.1
Beryl Akoth et al.
At a crossroads of two global biodiversity hotspots: amphibian assemblage wide evaluation of the biogeographic patterns of the Shimba Hills of Kenya.

P12.2
Chris Barratt et al.
Speciation patterns in the lowland forests of East Africa

P12.3
Jens Mutke et al.
Biogeography and biodiversity of cacti – a first complete biogeographical analysis of a large plant family

P12.4
Michael Douglas et al.
Identifying critical habitats for conservation focus in eastern Africa and Madagascar with the aid of MODIS-based cloud climatologies

P12.5
Peter Borchardt et al.
Arbopro - a project to protect Afromontane tree species diversity of Ethiopia

P12.6
Silvia Carvalho et al.
Amphibian evolutionary hotspots in the Iberian Peninsula

P12.7
Joyshree Chanam et al.
Geographical variation and context-dependency in an ant-plant interaction in the Western Ghats biodiversity hotspot, India

P12.8
Jürgen Dengler et al.
Global patterns of vascular plant species richness, endemic richness and endemicity: a new approach to identify hotspots and cold spots

P12.9
Adrien Favre et al.
Direct and indirect effects of the uplift of the Qinghai-Tibetan Plateau on the evolution of Tibetan biotas

P12.10
Amir Lewin et al.
Patterns and drivers of vertebrate species richness in West Africa

P12.11
Ashlyn Levadia Padayachee
Mapping the distribution of ancient plant and animal lineages in southern Africa

P12.12
Laura Pollock et al.
Phylogenetic diversity in conservation planning: large PD gains with slight expansion of protected areas

P12.13
Alke Voskamp et al.
Avian phylogenetic diversity: global patterns and their drivers

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P13

Marine Biogeography

Poster Session: 16:30-18:30,
S61, Ground Floor

P13.1
Marc Fernandez et al.
Modelling the ecological niche of highly mobile species in a dynamic environment

P13.2
Théo Gaboriau et al.
Analysis of historical and evolutionnary constraints on reef fishes distribution at the Indo-pacific scale

P13.3
Yasuhiro Kubota et al.
Biodiversity of coral reefs and geographical pattern of marine protected area

P13.4
Fabien Leprieur et al.
Global-scale patterns of phylogenetic structure in tropical reef fish assemblages

P13.5
Anja Singer et al.
Modelling the past, present and future distribution of macrofauna species in the Jade Bay (North Sea, Germany)

P13.6
Amy Waterson et al.
Planktic foraminifera: modelling the climatic constraints on modern and palaeo-biogeography

P14

Natural-Disturbance Biogeography

Lightning Talks: 15:30-16:30, **RW H25**
Poster Session: 16:30-18:30,
Corridor West, Ground Floor

P14.1
Alina Baranova et al.
Feed values variation in arid mountain pastureland under grazing impact in Qilian Shan, NW China

P14.2
Caitlyn Debevec
Mosquito (Diptera: *Culicidae*) biodiversity in south-central Florida and the dilution effect for exposure to zoonotic disease

P14.3
Lisa Guan et al.
Causes and consequences of riparian tree recruitment in a steep Mediterranean river

P14.4
Anke Jentsch
Towards generality in studies of disturbance and ecosystem dynamics

P14.5
Eunyoung Jung et al.
Variation of plant drought tolerance in temperate grasslands: Effects on community assembly and ecosystem resilience

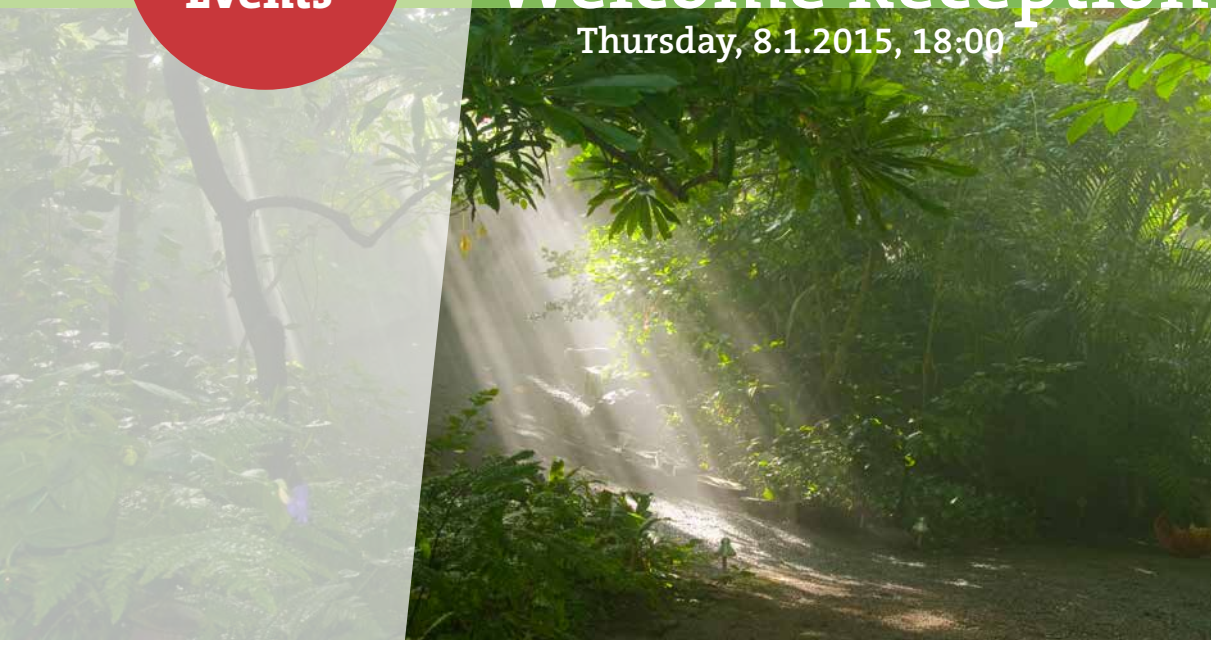
P14.6
Ipek Özalp et al.
Geographical fundamenthals of the plant diversity at the south of the Göksu Valley (TASELI Plateau) Turkey

P14.7
Birgit Schwabe
Disturbances in an alpine valley, Reintal, Wetterstein

Social Events

Welcome Reception

Thursday, 8.1.2015, 18:00



In the evening of January 8th the IBS 2015 conference welcomes its guests at the place of the Bayreuth University campus which is both warmest and best known to the citizens in the region: in the green houses of the **Ecological Botanical Gardens.** Enjoy first conversations on international biogeography - and a first taste of the local „beerdiversity“

Bus shuttles depart to hotels at 22:00 and 22:30

Poster Parties

The poster sessions are accompanied by hors d‘oeuvres and drinks, accompanying persons are welcome to join!

Brown Bag Discussions

During lunch on Saturday and Sunday you are invited to join our informal „brown bag discussions“, which will actually take place with real plates and without brown bags in an adjoining room of the cafeteria. These discussions are aimed at soliciting input from all members of IBS, in particular with regards: (1) Directions of IBS as we move ahead and grow; (2) how you can become more involved; and (3) any other topics that you would like to have discussed.

Conference Banquet

Saturday, 10.1.2015, 19:00
Deutsches Dampflokomotivmuseum Neuenmarkt

The banquet will take place in the German Museum of Steam Engines, 20 km north of Bayreuth. The engine shed is used for celebrations. You may stroll through the museum which has been recently re-opened with all explanations given in English and German.

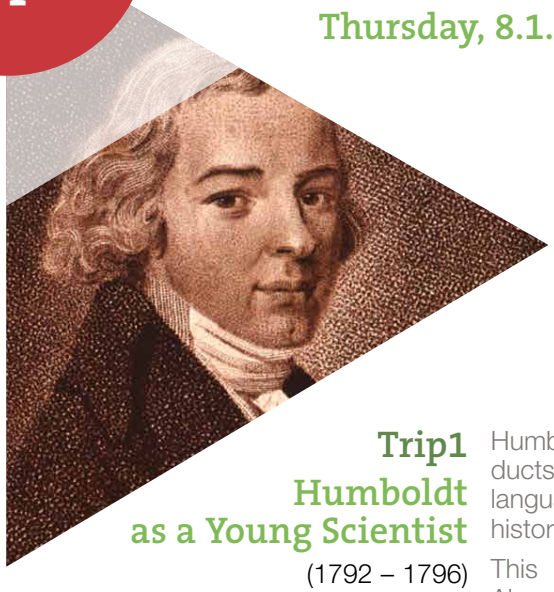
Shuttle buses will take you to Neuenmarkt. Sturdy shoes are recommended, as the floor in the engine shed is uneven.

First bus shuttle to hotels at 22:30.

Field Trips

Pre-Conference Trips

Thursday, 8.1.2015



Trip1
Humboldt as a Young Scientist

(1792 – 1796)

Alexander von Humboldt is an outstanding founder of biogeography. However, he started working in geology and mining. After he had finished his studies, he was sent to the former Margrafentum Bayreuth, where the last Margraf (Duke) resigned without heirs. At this time the whole region became part of Prussia. The efficient Prussian administration carried out an assessment about the natural resources in the area and Humboldt was in charge for this. Obviously, he did an excellent job, because after submitting his expertise, he was hired as a director of mining and he stayed in this position until his mother died. From then on, he felt free for traveling and discovery. However, the foundation for his later works was laid in the mountains of Northern Bavaria where Humboldt conducted extensive field work and tried to understand natural processes at very young age. He was 23 years old when he started to work here. Later on he said about this time in the mountains: "I made my major plans there". However, this very influential time is mostly neglected in international studies about Humboldt, because the scientific products were not transformed into foreign language books but remained mostly historical documents in German.

This excursion will visit places where Alexander von Humboldt was active and include forest ecosystems and mining areas in the Fichtelgebirge and Frankenwald mountain ranges. Some years later, the writer Wolfgang von Goethe visited the same region, too, becoming fascinated by natural history and trying to understand weathering processes and landforms. These mountains are extremely diverse in bedrock, which is reflected in a high beta-diversity, but this can hardly be seen during winter.

Leader: Carl Beierkuhnlein
Participants: max.50
Requirements:
Hiking boots and warm, weatherproof clothing are recommended, snow-rich conditions should be expected.
Return: About 18:00
Costs: 55 Euro

Extra opening hours of the Ecological Botanical Garden during the IBS Conference for individual visits:

Thursday, Friday, Saturday and Sunday
10:00-16:00

Trip2

World cultural and natural heritage in Bamberg

Bamberg, first mentioned 902 AD is one of the oldest and historically best preserved cities in Germany. The historic city centre, which is full of mediaeval charm and baroque architecture, offers the opportunity to experience the rich and divers medieval history of Germany. The city and surrounding countryside strongly reflect the rule by the church from 1007 to 1802 (when it was sacked by Bavarian troops). On a city tour, we will explore Bamberg's rich history with mighty bishops, cruel witch-hunts and revolutionary democrats. Beyond architecture and history, Bamberg is a hub of Franconian culture and cuisine and Germany's brewing hotspot.

On the way to Bamberg we will stopover at the nice church Gügel built in a scenic landscape on a widely visible, large rocky outcrop of limestone, from which we will have a marvellous view at the surrounding countryside and the close by castle Giechburg. It was here, where the prince-bishop fled in 1430 during the Hussite Wars to protect his treasure from his religious enemies.

Leader: Manuel Steinbauer
Participants: max.20
Requirements: -
Return: About 18:00
Costs: 55 Euro

Guided Tour

University of Bayreuth Ecological-Botanical Garden

The University of Bayreuth Ecological-Botanical Garden (EBG) curates a collection of about 12000 plant taxa from temperate to tropical regions all around the world. The specific feature is that they are mostly grown in environments closely resembling their natural habitats. During our tour - depending on weather conditions - we will walk through forests of Asia, America and Europe, through prairies and the steppe. In the six climatically different greenhouses we will get an impression of the enormous wealth of the tropics, from lowland rainforests, mangroves, tropical dry forests to the vegetation of the Canary Islands. Beside the diversity of plants their ecological relationships and functions are displayed to contribute to the important task of nature conservation.

Supporting the university in research and teaching is also a central task of the EBG as well as education and recreation for the public. This implies sophisticated technical installations - we will also get an impression of this „EBG backstage".

Tour A starts 13:00
General Tour

Tour B starts 15:00
Following the footsteps of Alexander von Humboldt:

Start at the entrance of the Ecological-Botanical Garden

Tour guide: Marianne Lauerer
Participants: max. 25
Duration: 90 minutes
Costs: - free of charge -

Field Trips

Post-Conference Trips

Monday, 12.1.2015

Trip3

Biodiversity and beerdiversity

in the Franconian Switzerland

The cultural landscapes of Northern Bavaria have been modified by human activities since very long time. Settlements were mainly limited by the availability of water in the karst area. However, the high fertility of soils and the mild climate favoured agriculture, which led over the centuries to the development of fine grained and highly diverse landscapes. Resulting from sheep and goat grazing, it is especially limestone grassland with juniper bushland has an outstanding biodiversity. The geodiversity within the Jurassic formation contributes to the high beta diversity within the landscape. Most impressive are rock formations that were formed as tropical reefs and are mainly build up by sponges. Also, caves are frequently serving as overwintering habitat for many species.

Besides the current land use diversity, it is also the legacy of historical land use that has effects on species distribution patterns. This landscape was an early destination of tourism at the beginning of industrialization, when travelling to more remote places would have been quite time consuming and risky. Even if the landscapes have been transformed substantially since then, still open canopies in scots pine forests allow thermophilic species to persist with local populations that have been established more than one hundred years ago when forest cover was much less. Today, nature conservation and tourism are working closely together with the aim to maintain and re-create larger surfaces of open and species rich habitats. One form of tourism and sports, free-climbing, has caused conflicts in the past due to the mechanical impacts on rare and specified rock organisms. As there is not at all a shortage in appropriate rocks, today overarching concepts are implemented that clarify priorities and direct climbing activities to places where negative impact is low.

The highest density in breweries worldwide will be acknowledged by two stops. Local products as they are offered in small breweries with centuries of history are supporting the local economy and also the identification of rural people with their villages.

Leader: Carl Beierkuhnlein
Participants: max.50
Requirements:
Hiking boots and warm, weatherproof clothing are recommended, snow-rich conditions should be expected.
Return: About 20:00
Costs: 55 Euro

Trip4

Forest springs as island habitats and natural laboratories

Springs feature an island position in the terrestrial and aquatic environment according to their inherently constancy in environmental conditions including water supply, nutrient availability and low human impact. Year-round constancy in temperature regime resulting in a thermal moderate hideaway for numerous environmentally confined species during hot summers and cold, snow-rich winters support this island character of springs. This is the reason that springs stand out as natural laboratories for field studies of biotic community responses to anthropogenic changes in environmental conditions.

Central European forest ecosystems have been affected by acidic depositions until the end of the 20th century and are likely to respond to sudden and gradual climatic shifts in the near future. In springs, an-thropogenic shifts in catchment biogeochemistry cause changing chemistry of spring water, which in turn affects crenal plant community composition. This allows for a spatial and temporal inte-grative biomonitoring of forest ecosystem processes on land-scape scale. In the ad fontes research project we assess this potential of forest springs. Based on a 24 year long time series of spring water and vegetation analyses from springs which occur in high spatial density in the lower mountain ranges of north-eastern Bavaria, we investigate the long- and short-term ecological re-sponse of springs to gradual and sudden climatic shifts.

During this trip we will visit some of our monitored springs in the Fichtel Mountains, which appear as green oasis in the typically snow-rich winters of this forest-rich massif east of Bayreuth. We will give you information about the geomorphology and landscape history of this region and their implications for the high spatial occurrence of springs. Furthermore, we will discuss recent findings and future implications of our research project. A final stop in one of the numerous local pubs, famous for their homemade beer, will give you the opportunity to discuss and socialize.

Leader: Andreas Schweiger
Participants: 20
Requirements:
Hiking boots and warm, weatherproof clothing are recommended, snow-rich conditions should be expected.
Return: About 20:00
Costs: 55 Euro

Field Trips

Post-Conference Trips

Monday, 12.1.2015

Guided Tour

EVENT Experiments (I to VII)

and European Coordinated Experiment SIGNAL

Biodiversity experiments, climate change research and invasion ecology join up to assess European gradients of resilience in the face of climate extremes. We will visit and discuss a decade of climate change experiments carried out in Bayreuth (EVENT I-VII, SIGNAL, BIODEPTH continued).

Extreme weather events and the presence of invasive species can act as pressures threatening biodiversity, resilience and ecosystem services. These pressures can suddenly drive ecosystems across tipping points and beyond thresholds of system integrity. Yet, biodiversity itself can buffer against change. Potential stabilising mechanisms include species richness, presence of key species such as legumes and within species diversity. The series of EVENT experiments has analysed the impact of extreme weather events such as drought, heavy rainfall and late frost on multiple ecosystem functions. SIGNAL – a pan-European Biodiversa research project - jointly performes coordinated field experiments across 10 European countries joining climate change, biodiversity and invasion research.

Start: 11 a.m. at the entrance of the Ecological-Botanical Garden-

Tour guide: Anke Jentsch
Participants: max. 25
Requirements: -
Duration: 2 hours
Costs: - for free -

Guided Tour

University of Bayreuth Ecological-Botanical Garden

General Tour starts 9:00

Guided Tour

Paleobotanical Rossmann Collection

Upper Franconia and the surroundings of Bayreuth are well-known for their wealth of petrified wood from the Triassic. During the last decades, several intact pieces of petrified stems of trees, up to 6 m in length with rudiments of roots and branches have been retrieved, at first from the campus of the University of Bayreuth. They now represent the core pieces of a meanwhile large palaeobotanical collection founded by the former head of the Botanical Garden, Professor G. Rossmann.

The Rossmann-Collection ranges among the ten most prominent collections of this kind in Central Europe. It is situated on the University Campus in a conservatory adjacent to the Botanical Garden.

Start: 11 a.m. at the entrance Rossmann Collection (left hand side of the entrance Ecological-Botanical Garden)

Tour guide: Klaus-Martin Moldenhauer
Participants: max. 30
Requirements: -
Duration: 1,5 hours
Costs: 10 Euro

Places are still available for all trips

WORKSHOPS:

8.1.2015:
8:30-17:00

Towards the ‘next generation’ of species distribution modeling: emerging themes and methods

- fully booked -

13:00-17:30

Free your mind: Model comparison and model testing in historical biogeography with the R package ‚BioGeoBEARS‘

13:00-15:00
EU-fundraising in the field of biogeography

12.1.2015:

8:30-12:00

Integrative analysis of spatial biodiversity data and Map of Life

- fully booked -

Info A-Z

Baggage Room

On Sunday, participants departing from the conference can store bulky luggage at the Conference Office (Audimax).

Cash Machine

Additional bookings at the Conference Office can only be paid in cash. You can get money at the cash machine in the university's cafeteria.

Conference Office

(open 8-11 January 2015)
The Conference Office in the Audimax is open for all organizational concerns during the conference as well as at the Welcome Evening on Thursday (registration, booking of add-ons, cancellations etc). It can be reached by phone (+49 921 55-5701).

An info point is available in the RW building during afternoon sessions (no printing and payment option).

Opening hours and location of the Conference Office:

Thursday	18:00-22:00	Ecological Botanical Garden
Friday	8:00-19:30	Audimax
Saturday	8:00-18:30	Audimax
Sunday	8:00-18:00	Audimax

Conference Program and Abstracts

The abstracts of nearly 100 oral and more than 370 poster presentations are compiled in a supplement of *frontiers of biogeography*, Volume 6, December 2014, together with a list of authors and participants. The book is available for download as electronic document on the website of the IBS.

Emergencies

If a building needs to be evacuated, you can find the assembly points outside the Audimax at the pond and outside the RW building in the direction of the parking lots. A list of emergency telephone numbers is provided at the coffee stands and in the Conference Office – please contact us in case of emergencies!

Field Trips and Guided Tours

Late booking of remaining free places is possible in the Conference Office. More information on the field trips and guided tours can be found on page 42 of this booklet.

Internet

Participants with Eduroam-access can use this wireless network at the University of Bayreuth. Individual WLAN access codes are provided at the Conference Office.

Lightning Talks

About 220 posters will be presented in one-minute "lightning talks" in four lecture rooms in the hour before each poster session (see program tables). The posters with a lightning talk are highlighted by a little flash sign in the program and on poster labels.

Meals

There are vouchers for lunch in the university's main cafeteria ("Mensa") in your conference documents. During the conference coffee breaks, as well as during the two poster parties, beverages and snacks are provided. There is a bistro in the RW building, which is open during the conference and can be used on your own expenses.

Oral Presentations

The time slot for contributed talks is 15 minutes (12 minutes presentation, 3 minutes questions). The presentation file should be transferred to the presentation laptop before the start of the session. There is a **Speaker Ready Room** (S67, first floor in RW building). The presentation laptops will be available during breaks, allowing you to check whether your presentation is running properly.

Parking

There are several parking lots near the conference venue. Parking at the university is free of charge. You may also use the free parking lots near the public swimming pool “Kreuzsteinbad”, close to the Audimax and not crowded in January.

Poster Sessions

The 370 posters will be presented in two poster sessions on Friday and Saturday afternoon. Posters should be **handed in at the Conference Office on Friday morning** and will be put up by helpers until the first poster session starts. Posters can stay on the boards until Sunday afternoon and should be **taken down by the presenters before Sunday, 16:30.** We will store poster tubes and provide them from Sunday, 14:30 in the vicinity to the posters boards (please label tubes with your name).

Presenters are requested to be available at their poster in the following timeslots:

Poster Session #1
Friday, Jan 9: PS 2+4, CT 1-4
odd numbers: 16.15-17.15,
even numbers: 17.15-18.15

Poster Session #2
Saturday, Jan 10: CT 5-14
odd numbers: 16.30-17.30
even numbers: 17.30-18.30

Public Transport

The schedule for the bus shuttle from and to the conference hotels can be found in the hotels, at the Conference Office and on the internal website. Walking distance from downtown is about 2 km. The bus lines 304 und 306 take you from the campus to the city from the bus stops “Uni-Verwaltung“ and “Mensa“. Please ask at the Conference Office when you need help or further information.

Taxis

Taxi Kroter +49 921 16 64
Taxi-Union Bayreuth +49 921 1 94 10

Taxi Schröder +49 921 6 65 66
(transport for handicapped people, payment per credit card possible)

Tourist Information

Basic tourist information material will be provided at the conference office. Detailed information can be obtained at

Kongress- und Tourismuszentrale der Stadt Bayreuth
Opernstraße 22, 95444 Bayreuth
Telefon: +49 921 88588
Opening hours: Mon-Fri 9:00-19:00,
Saturday 9:00-16:00

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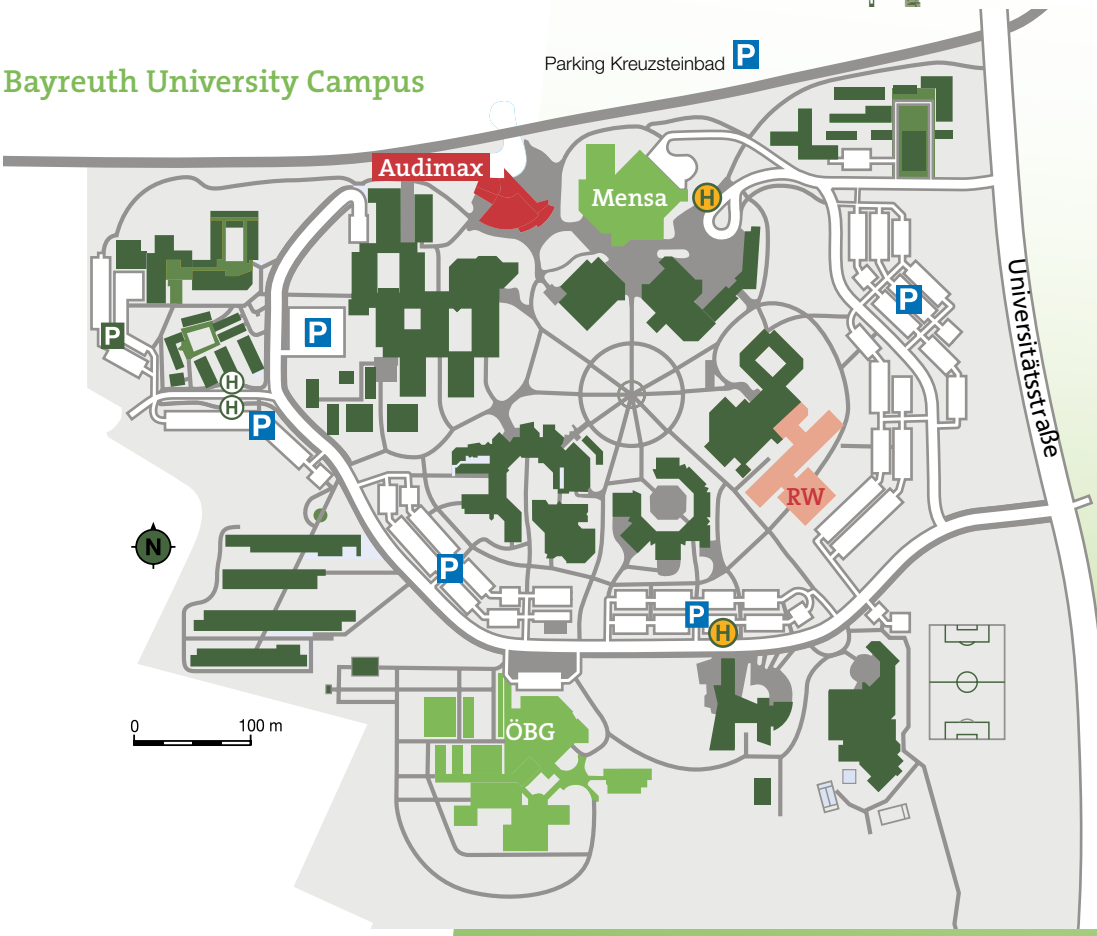
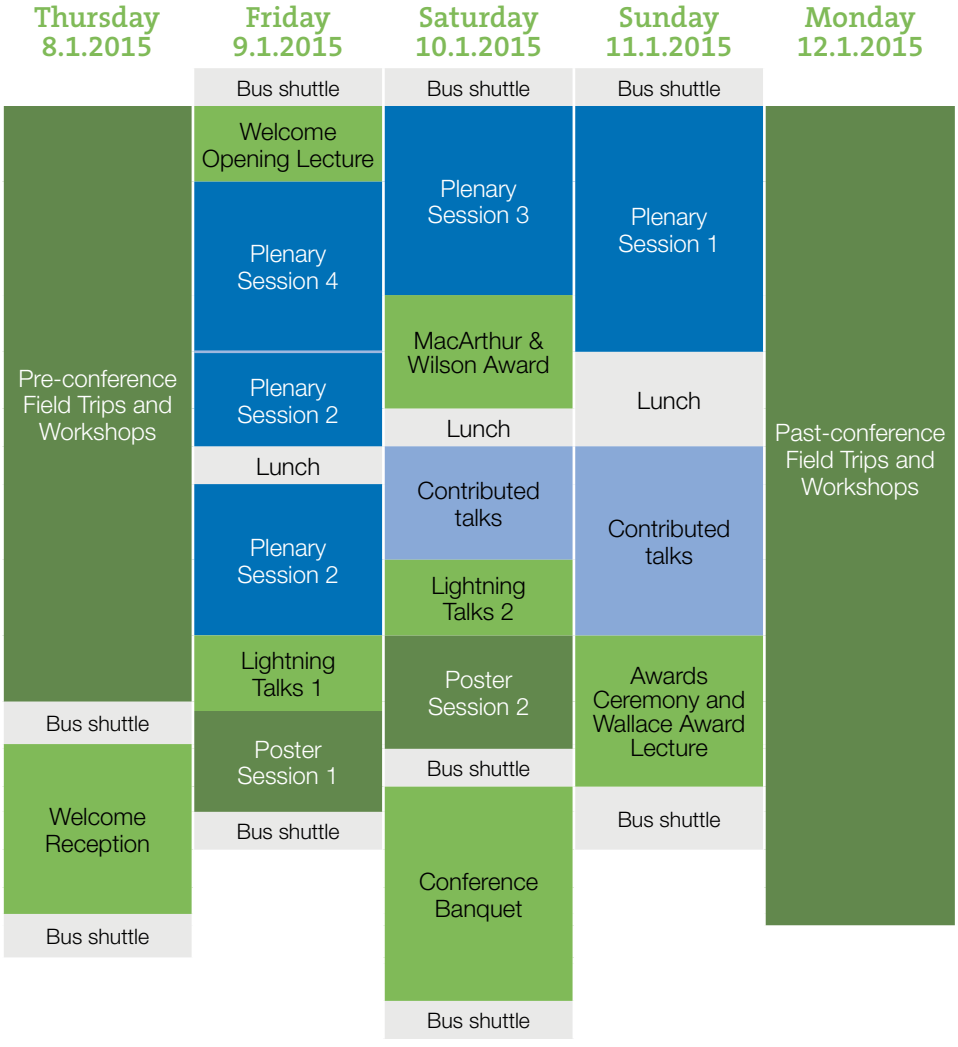
Bayreuth City Map

Bayreuth University Campus



Overview


Thursday 8.1.2015
Friday 9.1.2015
Saturday 10.1.2015
Sunday 11.1.2015
Monday 12.1.2015
Bus shuttle
Bus shuttle
Bus shuttle
Pre-conference Field Trips and Workshops
Welcome Opening Lecture
Plenary Session 4
Plenary Session 2
Lunch
Plenary Session 2
Lightning Talks 1
Poster Session 1
Bus shuttle
Plenary Session 3
MacArthur & Wilson Award
Lunch
Contributed talks
Lightning Talks 2
Poster Session 2
Bus shuttle
Conference Banquet
Bus shuttle
Plenary Session 1
Lunch
Contributed talks
Awards Ceremony and Wallace Award Lecture
Bus shuttle
Past-conference Field Trips and Workshops
Bus shuttle
Welcome Reception
Bus shuttle