



European Ecological Federation



12th EEF Congress

25-29 September 2011, Ávila, Spain

"RESPONDING TO RAPID ENVIRONMENTAL CHANGE"

10th Annual Conference of the
Spanish Association for Terrestrial Ecology

13th Annual Meeting of the
Portuguese Ecological Society

3rd Iberian Congress of Ecology

A E E T



ASOCIACIÓN ESPAÑOLA
DE ECOLOGÍA TERRESTRE



Sociedade Portuguesa de Ecologia



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- D^a. Cristina Garmendia Mendizábal, Minister of Science and Innovation.
- D^a. Teresa Ribera Rodríguez, Secretary of State for climate change.
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- D. Juan Vicente Herrera Campo. President of the Junta of Castilla y León.
- D. José Antonio de Santiago-Juárez López, Minister of presidency of the Junta of Castilla y León.
- D. Miguel Ángel García Nieto, Mayor-president of the Avila's town hall.

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- Fernando Valladares, Institute for Natural Resources - Centre for Environmental Sciences- Spanish National Research Council (MNCN-CSIC) Madrid, Spain
- Adrián Escudero, Rey Juan Carlos University (URJC), Madrid, Spain.
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- Andras Baldi, Hungarian Natural History Museum, Budapest, Hungary
- James Bullock, Centre for Ecology and Hydrology, Natural Environment Research Council (NERC), Oxfordshire, United Kingdom
- Jutta Stadler, The Helmholtz Centre for Environmental Research (UFZ), Leipzig, Germany

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- Fernando Valladares, Institute for Natural Resources - Centre for Environmental Sciences- Spanish National Research Council (MNCN-CSIC) Madrid, Spain
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- Luis Cayuela, Rey Juan Carlos University (URJC), Madrid, Spain.
- Sonia García-Rabasa, Institute for Natural Resources - (MNCN-CSIC) Madrid, Spain
- Luis Giménez-Benavides, Rey Juan Carlos University (URJC), Madrid, Spain.
- Rubén Milla, Rey Juan Carlos University (URJC), Madrid, Spain.
- Leyre Jiménez-Eguizábal, Spanish Association for Terrestrial Ecology (AEET), Madrid, Spain



Dear Colleagues:

The 12th European Ecological Federation (EEF) Congress is, in fact, the first EEF 'Congress': many will remember that in previous years EEF meetings have been known as European Ecological Congresses 'EURECO'. From 2011 onwards, EEF meetings will be held once every two years, and we will continue to organize our conferences as joint Congresses with our member organizations as well as with other international ecological societies.

Over the last few years, the EURECO increased in scientific quality and size. Our conferences became important meetings for European ecologists, a place for scientific exchange and symposia demonstrating European-wide scientific projects. We will continue this growth with the EEF Congresses. Our Congresses are a window onto ecological science in Europe but also a place for ecologists to meet with national and European funding organizations, research institutions and representatives of the European Commission as well as non-governmental organizations.

The title of our Congress, "Responding to Rapid Environmental Change", reflects the fact that ecologists are meeting one of the great challenges of the present: how to deal with the impact of global change on ecosystems. The EEF is most grateful to the Spanish and Portuguese associations (AEET and SPECO) for hosting in 2011 what promises to be an excellent meeting, advancing the science of ecology in Europe and bringing the very best scientific minds together to consider how ecology can contribute to tackling many of the challenges faced by society and the environment across the globe.

Prof. Dr. Stefan Klotz. President of EEF

It was with great pleasure that we accepted the invitation to organize the 12th European Ecological Congress to take place in Avila (Spain) from 25th to 29th September 2011. The Spanish Association for Terrestrial Ecology (AEET) and the Portuguese Ecological Society (SPECO) have made a great effort to bring together talented scientists, novel ideas and promising students to tackle ecological issues under the framework of global change. It was a challenge and we think that with the joint effort of many colleagues we have been able to arrange a stimulating scientific program. We are very grateful to the many ecological associations and academic institutions that supported this event and that has profoundly contributed to it. Our venue, Avila, a quiet, small town of medieval feel, was chosen in order to promote scientific discussions in an inspiring and peaceful setting. We are grateful to the local, regional and national authorities and institutions that have also to make the meeting a reality.

We wish you a successful experience both with the scientific and the cultural activities that are programmed.

Prof. Dr. Fernando Valladares. President of AEET
Prof. Dr. Helena Freitas. President of SPECO



All plenary lectures in Room Sinfónica (SIN)

PROF. THORSTEN WIEGAND - Department of Ecological Modelling. The Helmholtz Centre for Environmental Research (UFZ), Germany

"Spatial point pattern analysis in ecology"

Monday, 10:15-11:00

PROF. JORDI BASCOMPTE - Department of Integrative Ecology. Doñana Biological Station, Spanish Research Council (CSIC), Spain

"Plant-Animal Mutualistic networks: the Architecture of Biodiversity"

Monday, 15:00-15:45

PROF. TERRY CHAPIN - Department of Biology and Wildlife. Institute of Arctic Biology, University of Alaska Fairbanks, USA

"Earth Stewardship: Sustainability Strategies for a Rapidly Changing Planet"

Tuesday, 08:30-09:15

PROF. ISABELLE OLIVIERI - Institut des Sciences de l'Évolution-Montpellier, National Center for Scientific Research (CNRS). University of Montpellier, France

"Conservation biology: why evolution matters"

Tuesday, 14:15-15:00

PROF. GEORGINA MACE - Centre for Population Biology, Natural Environment Research Council (NERC)

Imperial College London, UK

"Pushing the boundaries of ecological science: emerging topics for the coming decades"

Wednesday, 08:30-09:15

PROF. JANE MEMMOTT - Ecological and Evolutionary Processes Group. School of Biological Sciences, University of Bristol, UK

"Ecological Restoration: theory, practice and reality"

Wednesday, 14:15-15:00



O: Opening session lecture, (20+5 min); R: Regular talk, (10+5 min); F: Flash presentation (3+2 min)

11:30-13:30 Monday morning parallel sessions

S.01 - LIMITATIONS TO GREENHOUSE GAS ASSIMILATION ACROSS SCALES IN A WARMING WORLD. (Room C1). Victor Resco (CIFOR, Toledo, Spain) and Penélope Serrano Ortiz (EEZA, Almería, Spain).

- O Bert Drake. Plants and CO₂: Will rising temperatures trump CO₂ fertilization?
- R1 Russel Monson. Weakening of CO₂ sinks in the subalpine forest ecosystem
- R2 Helena Martins. The Carbon Footprint and the role of agriculture practices and soil in the carbon sequestration
- R3 Simone Mereu. Photochemical response of *Cistus monspeliensis* L. to temperature and drought.
- R4 Angelica Baldos. Above-ground net primary production response to 4 years of nitrogen addition in a tropical lower montane forest
- R5 Juvia Sueta. Chronic N addition to tropical forests: impact on N-oxides fluxes, N₂O sources, and soil-profile N₂O concentrations
- F1 Nuria Altimir. CAPACITI: a project on the Carbon dynamics in Pyrenean grasslands: a first-time assessment with ecosystem fluxes, isotopic labelling, and plant guilds
- F2 Luis Matías. Precipitation regime exerts a stronger control on soil respiration pattern than other biotic or abiotic factors in a Mediterranean mountain ecosystem
- F3 Lina Fusaro. Seasonal variation in Q₁₀ and respiration in evergreen Mediterranean maquis species.

S.02 - DRIVERS OF POLLINATOR LOSS IN EUROPE. (Room C2). Montserrat Vilà (Doñana Biological Station, CSIC, Spain) and Simon Potts (University of Reading, UK).

- O Neil Williams. Life history, resource complementarity and the sensitivity of pollinators to land-use change
- R1 Ana Montero. Impact of habitat fragmentation and invasions on pollinators: A meta-analysis
- R2 Alfredo Valido. The effect of invasive honeybee (*Apis mellifera*) on plant-animal pollination network in the high mountain scrubland from Tenerife (Canary Islands)
- R3 Dara Standley. Bioenergy crops: drivers of pollinator decline or favourable alternatives to conventional crops?
- R4 Nicolas Deguines. Impact of Urbanization on flower visitors assessed with a country-wide monitoring program based on citizen science.
- R5 Luisa Carvalheiro. Evaluating changes in plant-flower visitor communities through time at different spatial scales
- F1 Audrey Muratet. Pesticides, drivers of pollinators decline in private gardens?
- F2 Mickael Henry. Landscape composition influences honeybee colony dynamics in an intensive cereal farming system
- F3 Riccardo Bommarco. Drivers and trends of bumble bee community composition

S.03 - BIODIVERSITY AND ECOSYSTEM FUNCTIONING IN THE CONTEXT OF ENVIRONMENTAL CHANGES. (Room CAM). Hervé Jactel (UMR BIOGECO-INRA, France).

Session sponsored and coordinated by BACCARA EU PROJECT.

- O Xavier Morin. Depicting the effect of climate change on the relationship between tree diversity and productivity in European temperate forests



- R1 Sibylle Stoeckli. Relationship between tree diversity and performance at an experimental temperate tree plantation
- R2 Aitor Ameztegui. Tree dynamics and coexistence in the montane-subalpine ecotone: the role of different light-induced strategies
- R3 Alfredo Saldaña. Effects of woody species functional diversity on litter decomposition and primary productivity in a southern temperate rainforest
- R4 Julia Koricheva. Forest diversity effect on insect herbivory
- R5 Laura Concostrina-Zubiri. Biological soil crusts and local soil physico-chemical properties: BSC effect along a perturbation gradient
- F1 Nereida Melguizo-Ruiz. Disentangling food web spatial structure: variance components, model selection and path analysis
- F2 Aurore Coince. Diversity of ectomycorrhizal fungal communities of two representative European tree species along climatic gradients
- F3 Sonia Garcia Rabasa. Growth patterns of *Pinus sylvestris* along altitudinal gradients in its southern limit of distribution

S.04 - IMPACTS OF CLIMATE CHANGE MITIGATION MEASURES ON BIODIVERSITY AND ECOSYSTEM SERVICES. (Room C3)

Jens Dauber (vTI, Institute of Biodiversity, Braunschweig, Germany), Jane Stout (Trinity College Dublin, Ireland) and David Bourke (Trinity College Dublin, Ireland).

- O Pam Berry. The ABC of Adaptation, Biodiversity and Climate change
- R1 Astrid Taylor. Caught between a rock and a hard place: Tree stumps as a bioenergy resource or biodiversity hotspots? - Case scenarios from Sweden.
- R2 Laura Meller. Biofuels: fuelling climate change mitigation or biodiversity loss?
- R3 Sarah Baum. Vascular plant species diversity in short rotation coppice plantations (SRCs) of agricultural areas.
- R4 Peter Dalin. Interactions between climate change and agricultural intensification on insect pest voltinism.
- R5 Simone Hepp. Impact of diverse grass species on nitrous oxide emissions.
- F1 David Bourke. Ecologically sustainable development of wind energy in Ireland - how to conserve biodiversity and ecosystem services?
- F2 Melanie Gibbs. Biodiversity implications of the 'Climate Matching' forest management strategy
- F3 Muhammad Tariq. Drought alters interactions between root and foliar herbivores: links with plant chemistry

S.05 - THE ROLE OF ECTOMYCORRHIZAL COMMUNITIES IN CARBON CYCLING: NEW PERSPECTIVES AND EMERGING CONCEPTS. (Room M3).

Ken Cullings (NASA, USA), and Pierre-Emmanuel Courty (University of Basel, Switzerland).

- O Jean Garbaye. Can trees be mycoheterotrophic? Isotopic evidence of soil acquisition by ectomycorrhizal oak roots during reactivation
- R1 Jenny Talbot. Decomposers in disguise: mycorrhizal fungi as regulators of soil C dynamics under global change?
- R2 Eric Hobbie. Functional classification of ectomycorrhizal fungi provides new insights into carbon dynamics among soils, fungi, and plants
- R3 Marc-Andre Selosse. Plants that receive carbon from their mycorrhizal fungi: a different story in the tropics vs. temperate regions?



- R4 Ken Cullings. Where in the soil are the ECM hyphae?
- R5 Pierre-Emmanuel Courty. Saprotrophy of ECM fungi and interactions with decomposers
- R6 Florian Walder. Carbon investment and nutrient return relations of two plants sharing a hyphal network of arbuscular mycorrhizal fungi

S.06 - CAUSE-EFFECT RELATIONSHIPS IN FOOD WEBS. (Room M1-2). Fred Jopp (University of Miami, USA), Donald L. DeAngelis (University of Miami; U.S. Geological Survey, USA) and Alberto Basset (University of Salento, Lecce, Italy).

- O Donald DeAngelis. Reciprocal interaction between an aquatic food web and an fish population undergoing rapid evolutionary change
- R1 Alberto Basset. Body size dependent hierarchies in Mediterranean lagoon food webs.
- R2 Leonilde Roselli. Morpho-functional trait adaptations of marine phytoplankton to lagoon conditions: patterns, drivers and potential mechanisms
- R3 Loreto Rossi. Can Food Niche Width (13C) explain properties of detritus-based food webs in aquatic and terrestrial contexts? An analysis of food web and trophic niche using stable isotopes.
- R4 Hauke Reuter. Spatial aspects of Food Chain Efficiency – An Individual-based modelling approach
- R5 Fred Jopp. Analyzing the spatio-temporal dynamics of a tropical marshland small fish community
- R6 Joel C. Trexler. Evaluating alternative models of wetland interaction-web structure at the landscape-scale from the Everglades, USA.

15:45-19:15 Monday afternoon parallel sessions

S.07 - THEORETICAL ECOLOGY. (Room M3). Miguel Angel Rodriguez (Universidad Alcalá de Henares, Spain)

- O David Storch. Invariances in macroecology: Are species-abundance, species-area and species-energy relationships universal?
- R1 Michelle Greve. Species richness patterns of African Acacia: the effect of climate stability and browsers
- R2 Jaume Tormo. Aridity gradient and annual plants abundance, does exist a global pattern?
- R3 Sylvie Oddou-Muratorio. Mechanisms of local adaptations to climatic gradients: lessons from a Physio-Demo-Genetics Model
- R4 Marta Benito-Garzón. Modelling net primary forest productivity: a machine learning model calibrated with forest inventory data
- R5 Luis J. Gilarranz. Relating topological and dynamical approaches in spatial networks
- R6 Katja Schiffrers. Between the devil and the deep blue sea: dispersal under local adaptation and climate change
- R7 Elizabeth Elliott. Dispersal polymorphism and species' invasions
- R8 Thomas Hovestadt. Population regulation, relevant information, and the evolution of gender-specific dispersal
- R9 Emanuel Fronhofer. Random walks, intelligent movement and mental maps: a comparison of search strategies
- R10 Ingo Hahn. Endemic habitat specialists vs. invasive habitat generalists: Habitat selection and population fluctuations in Island Birds

S.08 - STABLE ISOTOPES IN ECOLOGICAL PROCESSES. (Room M1-2). Cristina Aponte (Institute for Natural Resources and Agrobiology, Spain), M^a Paz Esquivias Segura (University of Sevilla. Spain), Juan Pedro Ferrio, (University of Lleida. Spain) and Sara Palacio (IPE, CSIC, Spain).

- O Cristina Máguas. $\delta^{13}\text{C}$ and $\delta^{18}\text{O}$ isotopes to trace plant integrated processes: the case study of Mediterranean plant communities under drought stress

- S.09 - SURVEILLANCE AND MONITORING OF HABITATS AND SPECIES.** (Room C2). Rob H.G. Jongman (Wageningen UR, The Netherlands) and R.G.H. Bunce (Wageningen UR, The Netherlands).

- S.10 - ECOLOGICAL NETWORKS OF MUTUALISTIC AND ANTAGONISTIC INTERACTIONS. IMPLICATIONS FOR CONSERVATION AND RESTORATION.** (Room C3). Anna Traveset (IMEDEA, UIB, CSIC Spain) and Miguel Verdú (University of Valencia, Spain).

0 Jens Olesen. Ecological networks crossing habitat borders



- R1 Natacha Chacoff. An evaluation of the sampling completeness in a mutualistic network
- R2 Corinne Vache. Compartmentalization in plant-parasite and plant-herbivore networks: how to assess the relative contribution of the different underlying mechanisms?
- R3 Ruben Heleno. Seed dispersal networks in the Galapagos and the functional consequences of plant invasions
- R4 Matthias Albrecht. Aliens in the community: consequences of plant invasions on compartmentalization and species' roles in plant-pollinator networks
- R5 Gita Benadi. Can plant-pollinator mutualisms increase the diversity of plant communities?
- R6 Christop Kaiser-Burbury. Using pollination networks in tropical island conservation
- R7 José M Gómez. Ecological interactions are evolutionarily conserved across the entire tree of life
- R8 Alfonso Valiente. Plant facilitation networks and the assembling of ecological communities
- F1 Cristina Garcia. Genetic consequences of losing seed dispersal mutualisms
- F2 Jordi Moya-Laraño. Genetic variation, predator-prey interactions and food web structure
- F3 Colin Fontaine. Evolutionary and ecological constraints on the architecture of a highly resolve host-parasitoid network
- F4 Beatriz Amat. Network structure analysis gives new insights on resprouting shrub community composition in a semi-arid area
- F5 Ferenc Jordan. Keystone dynamics in networks: perspectives for systems-based conservation
- F6 Daniel Montoya. Network approaches and its implications for conservation

S.11 - IMPACTS OF GLOBAL ENVIRONMENTAL CHANGE ON THE STRUCTURE AND FUNCTIONING OF DRYLAND ECOSYSTEMS. (Room CAM). Fernando T. Maestre (Rey Juan Carlos University, Madrid, Spain) and Roberto Salguero-Gómez (University of Pennsylvania, USA).

- O Brenda Casper. A holistic approach to understanding demographic responses to climate change in desert plants
- R1 Maik Veste. Biological soil crusts controlling vegetation pattern in arid dunes - can we replace time by space?
- R2 Katja Tielbörger. Understanding population dynamics of annual plants under climate change
- R3 Adela Gonzalez Megias. Climate change effects on above- and belowground interactions on arid ecosystems
- R4 Peter Petraitis. Experimental study of the effects of climate change on flowering phenology in the Mongolian steppe
- R5 Jose Luis, Quero. Toward potential transitions in semi-arid plant communities on the face of climatic change: is the magnitude of change on structure and function mediated by abiotic stress?
- R6 Rob, Salguero-Gomez. Divide to survive: desert plant module shedding increases whole individual fitness
- R7 Jose Ignacio Querejeta. Climate change alters plant stoichiometry and isotopic composition in a semiarid Mediterranean shrubland
- R8 Fernando T. Maestre. Which community attributes govern ecosystem functioning in drylands? A global assessment
- R9 Andrew Thomas. Effects of temperature, moisture and land use on CO₂ efflux in cyanobacteria-crusts soils
- R10 Cristina Escolar. Warming enhances biological soil crust performance in a semi-arid Mediterranean environment



S.12 - EVOLUTIONARY HISTORY, ECOSYSTEM FUNCTION, AND CONSERVATION BIOLOGY: NEW PERSPECTIVES. (Room C1). Hélène Morlon (CMAP Ecole Polytechnique, France) and Franck Jabot (CEMAGREF Clermont-Ferrand, France).

Session sponsored by the FONDATION POUR LA RESEARCH SUR LA BIODIVERSITÉ.

- O Marc Cadotte. Phylogenetic diversity promotes ecosystem stability
- R1 Marten Winter. Twenty years in agony - About the integration of phylogenetic diversity into conservation practice?
- R2 Nicolas Mouquet. Phylogenetic constraints on ecosystem functioning
- R3 Ana Rodrigues. Complete, accurate, mammalian phylogenies aid conservation planning, but not much
- R4 Sandrine Pavoine. Are we losing phylogenetic diversity? a temporal partitioning of phylogenetic diversity reveals rockfish diversity loss in the Southern California Bight
- R5 Wilfried Thuiller. Consequences of climate change on the tree of life in Europe
- R6 Vincent Devictor. Phylogenetic diversity in conservation biology: the third man
- F1 Laure Turcati. On the comparison of taxonomic, functional and phylogenetic diversity of plant communities
- F2 Laure Zupan. Beyond conserving species: phylogenetic information does matter in conservation planning
- F3 Irena Simova. Global species-energy relationship in trees: the role of functional diversity across spatial scales
- R7 Jonathan Davies. Exploring the phylogenetic history of species richness gradients
- R8 Sebastien Lavergne. The dechronization of major angiosperm clades: climatic niche evolution and species diversification
- R9 Franck Jabot. Detecting areas or clades of high evolutionary potential using phylogenies and species distribution?
- R10 Helen Morlon. Integrating evolution into conservation biology: beyond phylogenetic diversity as a metric

09:15-12:45 Tuesday morning parallel sessions

S.13 - EVOLUTIONARY ECOLOGY. (Room C3). Adolfo Cordero (University of Vigo, Spain) and Silvia Matesanz (IRN, CCMA-CSIC, Spain).

- O José Climent. Intra-specific variation and plasticity of life history traits in two Mediterranean pines
- R1 Jacob Weiner. Evolutionary Agroecology - Applying Evolutionary Theory to Plant Production
- R2 Sylvain Delzon. Phenological adaptive responses of oak and beech to altitudinal gradients in the Pyrenees
- R3 Michal Gruntman. Seasonal contingency of compensatory responses to apical damage in a Mediterranean annual plant
- R4 Daniel Montesinos. Neo-allopatry and rapid reproductive isolation
- R5 Susana Gómez. Anthropogenic fire drives the evolution of seed traits in a naturally fire-free ecosystem
- R6 Peter Laszlo Pap. The evolution of constitutive immune defence in relation to life-history and parasitism in European birds
- R7 Erez Barkae. A generalist pit-building antlion is more efficient than a related specialist even in the latter's preferred environment



- R8 Sílvia Matesanz. High performance genotypes in a newly invasive species
- F1 Emilien Luquet. Heterozygosity-fitness correlations among wild populations of European tree frog (*Hyla arborea*) detect fixation load
- F2 Eva Graciá Martínez. Empirical evidences of genetic surfing in the spur-thighed Tortoise
- F3 Wibke Wille. Weed suppression by cooperative shading
- F4 Conchita Alonso. A piece of the puzzle: a method for comparing pollination quality and quantity across multiple species and reproductive events
- F5 Alicia Montesinos Navarro. Genetic diversification of life history strategies influencing seasonal germination in *Arabidopsis thaliana* along a climate gradient
- F6 Anne Dupuetié. How do genetic correlations affect species range shifts in a changing climate?

S.14 - FUNCTIONAL ECOLOGY. (Room C2). Helena Freitas (University of Coimbra, Portugal).

- O Winvan der Putten. Functional ecology of aboveground-belowground multitrophic interactions under global climate warming
- R1 Irene Cordero Herrera. Costs and benefits of structural photoprotection in a neotropical legume tree (*Caesalpinia spinosa* (Mol.) Kuntze)
- R2 Antonio Gascó. Hydraulic design of sun and shade leaves of five temperate co-occurring tree species
- R3 Pavol Elias. Functional groups of plants in a temperate deciduous forest community: an ecophysiological approach
- R4 Catherine Fernández. Allelopathy in *Quercus pubescens* Oak Forest: impact of chemical leaf compounds of an understory plant species on plant diversity
- R5 Sara Palacio. Defoliation by the pine processionary moth (*Thaumetopoea pityocampa*) does not lead to carbon limitation in trees
- R6 Ana M. C. Santos. Functional diversity of island parasitoid communities worldwide
- R7 Daizy Rani Batish. Invasive Potential of *Broussonetia papyrifera*: Role of Functional Traits
- R8 Sílvia Castro. Breeding barriers maintain a diploid-hexaploid contact zone in the polyploid *Aster amellus* aggregate
- R9 Cécile Albert. On the importance of intraspecific variability for the quantification of functional diversity
- R10 Iván Prieto. The role of hydraulic lift on seedling establishment under a nurse plant species in a semi-arid environment

S.15 - SYNTHESIZING COMMUNITY ECOLOGY, PHYLOGENETICS AND MACROECOLOGY. (Room M1-2). David Nogués-Bravo (University of Copenhagen, Denmark) and Nathan Sanders (University of Tennessee, USA).

- O Carsten Rahbek. The day after tomorrow - merging the fields of macroecology to answer the 'holy-grail question' of what determines species diversity
- R1 Jens-Christian Svenning. Paleoclimatic imprints on ecological patterns and function across scales
- R2 Andreas Prinzing. Innovative conservatism: why niche conservatism might help finding solutions to changing niche environments
- R3 Kenneth Kozak. Phylogeny, ecology, and origins of climate-richness relationships at regional and local scales
- R4 David Vietes. Patterns of species richness versus spatial phylogenetic diversity: a case study from a tropical biodiversity hotspot
- R5 Joaquín Hortal. Effects of glaciations on the species, phylogenetic and functional diversity of European mammals



- R6 Catherine Graham. Taxonomic, phylogenetic and functional diversity in South American hummingbirds
- R7 Robert Dunn. Predicting the large-scale consequences of tree phylogenetic diversity for disease dynamics, tree death, Carbon loss and maybe, just maybe, even fire.
- R8 Miguel Ángel Olalla-Tárraga. Linking macroecological patterns and macroevolutionary dynamics in species' range boundaries: global congruence in climatic niche conservatism across mammals and amphibians
- F1 Zhiheng Wang. Determinants of species diversity patterns of woody plants: linking environmental controls with evolution
- F2 Anne-Christine Monnet. Bird communities' responses to global changes: a multifaceted approach
- F3 Sally Keith. Incorporating biotic interactions into models of species richness gradients
- F4 Tamara Münkemüller. Beyond patterns - from diversity indices to community assembly processes
- F5 Susanne Fritz. Global comparison of diversification rates and biogeographic patterns across passerine birds
- F6 Jake Alexander. Elevational richness gradients caused by directional ecological filtering

S.16 - BIODIVERSITY AND ECOLOGICAL SERVICES IN AGRICULTURAL SYSTEMS. (Room C1). Manuel B. Morales (Autonomous University of Madrid, Spain) and Juan J. Oñate (Autonomous University of Madrid, Spain).

- O Tim Benton. The role of organic farming in a food-hungry world
- R1 Lisa. H. Denmead. The effects of agricultural intensification on invertebrate communities in adjacent forest reserves
- R2 Juan E. Malo. Seed dispersal by livestock promotes biodiversity conservation in agroecosystems
- R3 Frank Berendse,. Persistent negative effects of pesticides on biodiversity and biological control potential in European agricultural landscapes
- R4 Dennis Jonason. Assessing the effect of the time since transition to organic farming on plants and butterflies
- R5 Mario Díaz. Ecological effectiveness of agro-environment schemes: the role of non-linear and interactive effects of agricultural intensification
- R6 Janne Bengtsson. Organic farming, biodiversity, multifunctionality and sustainability
- R7 Teja Tscharntke. Biodiversity conservation and the future of agricultural intensification
- F1 F. Xavier Sans. The effect of farming system on invasibility: A study using *Amaranthus retroflexus* in maize crops
- F2 Audrey Alignier. Spatial distribution of weeds depends on landscape complexity
- F3 Irene Guerrero. Relative importance of landscape and field agricultural intensification components on european farmland birds
- F4 Emmanuelle Porcher. Crop genetic diversity benefits farmland biodiversity in cultivated fields
- F5 Gerardo Moreno. The importance of secondary habitats in organic and low-input farms for biodiversity. The case of dehesas and olive orchards in Western Spain
- F6 Claire Brittain. Drivers of non-Apis pollinators in California almond orchards and their benefits for fruit set
- F7 Ariella Gotlieb. Diversity patterns and pollination services of wild pollinators in agro-natural gradient
- F8 Eeva-Liisa Alanen. Promotion of pollination services, biodiversity and conservation on farmland by sown wildflower strips



- F9 Camilla Winqvist Flying and ground-dwelling natural enemies provide effective biological control of cereal aphids across landscapes
- F10 Konstantin Gavazov. Resistance of subalpine wooded pastures to climate change

S.17 - POPULATION ECOLOGY AND COMMUNITY ECOLOGY. (Room CAM). Begoña García (IPE, CSIC, Spain).

- O Dan Doak. Using spatially structured population processes to elucidate community functioning: demographic responses of a dominant African Acacia tree mediate community-wide effects of termites
- R1 Daniel W. Carstensen. The functional biogeography of species: distributional roles in Wallacea and West Indies
- R2 Arantzazu L. Luzuriaga. Annual plant communities in the semi-arid: facing all the odds.
- R3 Christian Schöb. Do cushion plants pay a fitness cost for being facilitator?
- R4 Juergen Kreyling. Stochastic trajectories of succession initiated by extreme climatic events
- R5 Eric Menges. Effects of very frequent fires on resprouting responses of shrubs in the Florida scrub
- R6 Benjamin Yguel. Loss of assemblage determinism of phytophages communities on phylogenetically fragmented forest canopies
- R7 Ana Sanz Aguilar. To leave or not to leave: tradeoffs between different migrating strategies in the greater flamingo
- R8 Jenni Korhonen. Productivity-diversity relationships in lake plankton communities
- F1 Joseph Chipperfield. When do we expect a negative relationship between biodiversity and ecosystem productivity?
- F2 Rachel Hovel. Climate-driven habitat changes restructure northern lake fish communities
- F3 José Miguel Olano. Soil seed bank recovery after extirpation occurs more rapidly than expected in semiarid environments
- F4 Raúl García Valdés. Climate, dispersal and biotic interactions influence in local colonizations and extinctions of trees in Spain
- F5 Jesus Vilellas. Adapt or die: changes in population dynamics across the range of a widespread short-lived herb
- F6 Sara Varela. Climatic vs. anthropic impacts on species spatial networks

S.18 - DRYLAND RESTORATION FROM ECOTECHNOLOGY TO PEOPLE. (Room M3). José María Rey Benayas (Universidad de Alcalá, Spain), Jordi Cortina. (IMEM, University of Alicante, Spain) and Jaime Puértollas (Fundación CEAM, Spain).

Session sponsored by REMEDINAL-2 project.

- O James Bullock. Restoring ecosystem services and biodiversity
- R1 Jordi Cortina. Ecological knowledge for the restoration of Mediterranean semi-arid lands
- R2 José M. Rey Benayas. "Farmland manicure" to restore biodiversity and ecosystem services on agricultural land
- R3 Francisco I. Pugnaire. Mutualistic interaction between shrubs in an arid ecosystem
- R4 Paloma Torroba. Influence of microhabitat in the natural regeneration of *Quercus petraea* in restored coal mines (Northern Palencia, Spain)
- R5 Ernesto Álvarez. VULTURNET. Connectivity of raptors scavengers populations through ecological corridors



- R6 Susana Bautista. Evaluation of restoration - Learning from science and people
- R7 María Pérez. Participative tools in environmental decision making processes: examples from Extremadura (Spain)
- R8 Lourdes Hernández. Standards for forest restoration
- R9 Elisabeht Hubbe-Sannwald. Challenges for restoration and sustainable development of drylands in Mexico
- F1 Antonio Ruiz-Navarro. Foliar fertilization as an approach to assess nutrient limitation in semiarid Mediterranean ecosystems
- F2 Teresa Mexia. Soil quality improvement in the restoration of limestone quarries

15:00-17:30 Tuesday afternoon parallel sessions

S.19 - ECOLOGICAL MODELS AND THEIR APPLICATIONS IN FOREST MANAGEMENT. (Room C3). Juan A. Blanco, (University of British Columbia, Canada) and Adam Wei (University of British Columbia, Canada).

- O Juan A. Blanco. Bringing ecology into forest management through ecological models: examples from the Northern Hemisphere
- R1 Christian Temperli. Landscape scale modelling of adaptative forest management for multiple ecosystem goods and services under climate change
- R2 Santi Sabate. Can we optimise forest management strategies under a changing climate? Linking GOTILWA+ process based model with Swarm Particles Optimization algorithm to support forest managers' decisions
- R3 Francesco Minunno. Bayesian calibration and Bayesian model comparison of two process-based model versions.
- R4 Mark Vanderve. Patterns of structural response to simulated partial harvesting of boreal mixed-wood stands
- R5 Sandro Pütz. Long-term carbon loss in fragmented Neotropical forests
- F1 Klara Dolos. Interactions of bark beetle outbreaks with fire, windthrow and drought
- F2 Livia Rasche. Forest succession models on the way to decision support tools
- F3 Luis Cayuela. Improving forest management practices through science: pest control in Mediterranean pine woodlands

S.20 - ECOSYSTEMS EVOLUTION DURING EARLY SUCCESSIONAL STAGES: HOW CAN WE LINK PATTERN AND PROCESSES FOR THE UNDERSTANDING OF ECOSYSTEM DYNAMICS?. (Room C2). Maik Veste (Cottbus, Germany) and Siegmund Breckle (Bielefeld, Germany)

- O Nick Cuttler. Spatiotemporal dynamics during succession: linking the surface to the soil
- R1 Eli Zaady. Human made disturbances and biological soil crust succession in semiarid environment
- R2 Thomas Fischer. Small scale spatial heterogeneity of biological soil crusts during initial ecosystem development
- R3 Sigmund Hågvær. Pioneer invertebrates on barren ground close to a receding glacier
- R4 John Bishop. Re-thinking the role of consumers in primary succession
- R5 Siegmund-W. Breckle. Early phases of succession on the desiccated floor of the Aral Sea
- R6 Josu G. Alday. Restoring vegetation in open-pit coal mines: short-term influence of abiotic factors



S.21 - INVOLVING CITIZEN SCIENTISTS IN ECOLOGY. (Room M1-2). Dan Bebber (Earthwatch Institute / University of Oxford, UK).

- O Johannes Vogel. We are all Citizen Scientists
- R1 Lia Vasconcelos. Online and face-to-face participation - articulating stakeholders' voices
- R2 Benoît Fontaine,. When thousands of citizens monitor common species: the French Garden Biodiversity Observatory
- R3 Daniel Mathieu. A network of botanists to develop and spread knowledge in a changing world
- R4 Isabelle Chuine. L'Observatoire Des Saisons: a French citizen science program designed to help scientists assessing the impact of climate change on biodiversity and ecosystems services
- R5 Nick Oguge. Participatory Resource Mapping and Biodiversity Assessments: involving the Samburu communities in conservation programmes in northern Kenya
- F1 Daniel Bebber. Volunteer data validation for forest dynamics plot inventory
- F2 Jenny Cousins. The practices, benefits and challenges of conservation volunteering as a mechanism for assisting conservation research

S.22 - ECOLOGICAL INDICATORS OF ENVIRONMENTAL CHANGE. (Room CAM). Cristina Branquinho (University of Lisbon, Portugal).

- O Pedro Pinho. Using lichen functional-diversity as ecological indicator in a changing Mediterranean environment
- F1 Amandine Gasc. Assessing biodiversity with sound: what do acoustic diversity indices measure?
- F2 Stefanos Sgardelis. Body size parameters as a tool for bioindication and taxonomical identification
- R1 Cristina Nabais. Growth response to climate of Mediterranean pines along a latitudinal gradient in Portugal
- F3 Andrey Tsyganov. *Sphagnum*-dwelling *Testate amoebae* in subarctic bogs are more sensitive to soil warming in the growing season than in winter: the results of eight-year field climate manipulations
- F4 Zoltan Elek . Urbanisation promote high developmental instability: variation in body condition of ground beetles in differently urbanised habitats
- R2 Kieran Monaghan. Performing old tricks with new tools: building biotic indices for river assessment from macroinvertebrate trait descriptions
- F5 Hilde Eggermont. The invertebrate-temperature relationship revisited: implications for their use as paleoclimate indicators in aquatic ecosystems
- F6 Aggeliki Doxa. The High Nature Value farmland as a large scale conservation tool to prevent further biotic homogenization
- R3 Isabel Martinez. How do lichens respond to forest disturbances in Mediterranean Spain?
- F7 Lauriane Mouysset. Contrasted ecological responses to scenarios for public agricultural policies
- F8 Tatiana Valada. The Ecological Footprint Indicator - analysis of the biocapacity

S.23 - DROUGHT-INDUCED FOREST DIEBACK: CAUSES, SCOPE AND IMPLICATIONS. (Room C1). Francisco Lloret (CREAF, Autonomous University of Barcelona, Spain) and Jordi Martínez-Vilalta, (CREAF, Autonomous University of Barcelona, Spain).

- O Andreas Rigling. Drought effects on Scots pine dieback in the European Alps - an integrative ecosystem analysis across multiple disciplines and scales

SCHEDULE



DAY	TIME SLOT		Room	Abrv. Room
MONDAY 26 SEPT.	09:00-10:15	OPENING CEREMONY	Sinfónica	SIN
	10:15-11:00	PLENARY LECTURE	Sinfónica	SIN
	11:00-11:30	COFFEE BREAK		
	11:30-13:30	S.01	Conferencias 1	C1
		S.02	Conferencias 2	C2
		S.03	Cámara	CAM
		S.04	Conferencias 3	C3
		S.05	Multifunción 3	M3
		S.06	Multifunción 1+2	M1-2
	13:30-15:00	LUNCH		
	15:00-15:45	PLENARY LECTURE	Sinfónica	SIN
	15:45-19:15 (17:00-17:30 BREAK)	S.07	Multifunción 3	M3
		S.08	Multifunción 1+2	M1-2
		S.09	Conferencias 2	C2
		S.10	Conferencias 3	C3
		S.11	Cámara	CAM
		S.12	Conferencias 1	C1
	19:15-20:00	POSTER SESSION	Ground & -1 Floors	
	20:00-21:00	GET TOGETHER RECEPTION		
TUESDAY 27 SEPT.	08:30-9:15	PLENARY LECTURE	Sinfónica	SIN
	09:15-12:45 (10:30-11:00 COFFEE BREAK)	S.13	Conferencias 3	C3
		S.14	Conferencias 2	C2
		S.15	Multifunción 1+2	M1 - M2
		S.16	Conferencias 1	C1
		S.17	Cámara	CAM
		S.18	Multifunción 3	M3
	12:45-14:15	LUNCH		
		SPANISH-FRENCH MEETING		

	14:15-15:00	PLENARY LECTURE	Sinfónica	SIN
	15:00-17:30 (16:15-16:45 BREAK)	S.19	Conferencias 3	C3
		S.20	Conferencias 2	C2
		S.21	Multifunción 1+ 2	M1-2
		S.22	Cámara	CAM
		S.23	Conferencias 1	C1
		S.24	Multifunción 3	M3
	17.30-19:30	POSTER SESSION	Ground & -1 Floors	
		ERNST HAECKEL AWARD / WEB ECOLOGY PRESENTATION	Cámara	CAM
		EDUCATION FORUM	Conferencias 3	C3
		EEF MEETING	Cámara	CAM
		AEET MEETING	Conferencias 2	C2
WEDNESDAY 28 SEPT.	08:30-9:15	PLENARY LECTURE	Sinfónica	SIN
	09:15-12:45 (10:30-11:00 COFFE BREAK)	S.25	Conferencias 1	C1
		S.26	Conferencias 2	C2
		S.27	Cámara	CAM
		S.28	Conferencias 3	C3
		S.29	Multifunción 3	M3
		S.30	Multifunción 1+2	M1 - M2
	12:45-14:15	LUNCH		
	14:15-15:00	PLENARY LECTURE	Sinfónica	SIN
	15:00-17:30 (16:15-16:45 BREAK)	S.31	Conferencias 2	C2
		S.32	Multifunción 3	M3
		S.33	Cámara	CAM
		S.34	Multifunción 1+2	M1-2
		S.35	Conferencias 3	C3
		S.36	Conferencias 1	C1
	17:30-18:30	CLOSING CEREMONY Students' European Ecology Prize	Sinfónica	SIN
	18:30-19:30	POSTER SESSION	Ground & -1 Floors	
	21:30-23:30	CONFERENCE DINNER		
	from 23:00	NIGHT DISCO-PUB		



- R1 Craig D Allen. An updated global overview of patterns and emerging climate change risks for forests due to drought-induced tree mortality
- R2 Marta Coll. Widespread crown condition decline, food web disruption, and amplified tree mortality with increased climate change-type drought
- R3 David D Breshears. Drought-induced tree die-off: Progress on mechanisms, consequences, and options from the perspective of the piñon pine *Pinus edulis* as a model species
- R4 Patrick Mitchell. Defining past and future bioclimatic limits on tree survival: a case study from southern Australia
- R5 Hendrik Davi. How to predict tree decline and mortality from process based models?
- F1 Anne-Sophie Sargent. Did wood traits and radial growth good indices of Douglas-fir vulnerability to mortality following severe droughts?
- F2 Juan Pedro Ferrio. Retrospective approach to dieback in *Pinus sylvestris* through the analysis of carbon and oxygen stable isotope composition in tree ring cellulose
- F3 Jorge Curiel Yuste. Microbial community shifts following climate-change driven ecological succession of a Mediterranean forest

S.24 - CONCEPTS IN THE CENTER OF ECOLOGICAL KNOWLEDGE? PROBING A REFLEXIVE TOOL IN BIOLOGICAL CONSERVATION, ECOLOGICAL MODEL BUILDING AND DATA COLLECTION. (Room M3). Kurt Jax (UFZ, Leipzig, Germany) and Astrid Schwarz, (TU Darmstadt, Germany / University of Basel, Switzerland).

- O Wolfgang Haber. Reflections on the conceptual framework of ecology - Focusing on the ecosystem
- R1 Yrjö Haila. Concepts used in conservation biology are ambiguous but don't worry: ambiguities are fruitful!
- R2 Eduardo Velázquez. Review on Point Pattern Analysis (1990-2009): findings and preliminary conclusions
- R3 Danny Hooftman. Should I stay and should I go: correlated plant extinctions over 70 years
- R4 Kurt Jax. Improving ecosystem assessments through conceptual analysis: reflections on the concept "ecosystem functioning"
- R5 Chunglin Kwa. Landscapes in fragments, vegetations in fragments: ambiguous interactions between schools in geography and ecology
- R6 Astrid Schwarz. Dynamics in the formation of ecological knowledge

09:15-12:45 Wednesday morning parallel sessions

S.25 - APPLIED ECOLOGY. (Room C1). Josep M^a Espelta (CREAF, Autonomous University of Barcelona, Spain).

- O Dorothee Hodapp. Biodiversity and Ecosystem Functioning-a case study on macrozoobenthos data from the German Wadden Sea
- R1 Vânia Proença. The use of species-area relationship models to assess habitat value for biodiversity conservation
- R2 Enrique Valencia. Indices based on soil surface indicators successfully predict soil functioning in semi-arid Mediterranean shrublands and grasslands
- F1 Miguel Garcia Gómez. Remote sensing data predict indicators of soil functioning in semi-arid steppes, central Spain
- F2 Clara Grilo. The impact of roads on wildlife: understanding the underlying mechanisms
- F3 Caterina Penone. Railway edges as functional corridors.



- R3 Karine Princé. Effects of French grassland measures on farmland bird communities
- R4 Josep M^a Espelta. Acorn predation in fragmented oak forests: Does fragmentation reinforce antagonistic plant-animal interactions?
- R5 André Große-Stoltenberg. Are exotic and native plant species in diverse Mediterranean dune ecosystems distinguishable based on spectral features of leaf chemistry?
- R6 Johan Stenberg. Predators consuming plant food: consequences for biocontrol
- F4 Judith Riedel. Limiting pest damage to native timber trees in the tropics: the effects of planning schemes on herbivory and potential natural antagonists
- F5 Cathy Jacquard. Genetic structure and larval competition among the complex of *Dacini* (*Diptera: Tephritidae*) attacking cucurbits on La Réunion
- F6 Sara-Marañón Jimenez. Post-fire salvage logging increases water stress and reduces seedling growth and nutrient uptake of *Pinus pinaster* in the Sierra Nevada, Spain.
- R7 Leonor Calvo. Is control burning an effective management tool to maintain the biodiversity of southern heathlands under the actual scenario of increased nitrogen deposition?
- R8 Elena Ormeno Lafuente. Prescribed forest burning application may promote production of carbon-based defence metabolites in *Pinus* sp under natural conditions: an indication of stress conditions

S.26 - TROPHIC INTERACTIONS AND ECOSYSTEM FUNCTIONING IN REAL-WORLD LANDSCAPES. (Room C2). Daniel García (Oviedo University, Spain) and Jason Tylianakis (Canterbury University, New Zealand).

- O Elisa Thebault. The structure and stability of mutualistic and antagonistic networks
- R1 Pedro Jordano. Multi-specific assemblages of free-living species: the functional value of complex mutualistic networks
- R2 Jason Tylianakis. Global change and ecosystem functioning: traits, resources, and networks of interactions
- R3 Daniel Stouffer. Understanding species' roles and dynamic importance in empirical food webs
- R4 Tomas Roslin. Dung beetle community structure and ecosystem functioning in fragmented landscapes
- R5 Riikka Kaartinen. High temporal consistency in food web structure in the face of extreme species turnover
- R6 Mathias Schleuning. The functional role of animal body mass for structuring seed-dispersal relationships in tropical and temperate ecosystems
- R7 Daniel García. Functional heterogeneity in a plant-frugivore assemblage conditions resilience of seed dispersal to habitat loss
- R8 Jochen Fründ. Functional complementarity drives the effect of bee diversity on pollination
- R9 Ángela Taboada. Effects of atmospheric nitrogen deposition on trophic interactions and ecosystem functioning in rear-edge *Calluna vulgaris* heathlands
- R10 Nina Farwig. Relative functioning of multiple ecosystem processes along the same landscape gradient

S.27 - CONSERVATION BIOLOGY. (Room CAM). Mario Díaz (Museo Nacional de Ciencias Naturales, CSIC, Spain)

- O Pablo Miguel Lucas. Assessing the dynamics of geographic range contraction
- R1 Rocío Belinchón. Massive biodiversity change between the pre- and post-industrial landscapes: a new direct measure using the archaeobotanical record
- R2 Victor Johansson. Occurrence patterns of epiphytic lichens are explained by the historical landscape at a small spatial and a large temporal scale



- R3 Andrew Suggitt. Microclimates and their significance for *Lepidoptera*
- R4 Rachel Pateman. Temperature driven niche expansion in a rapidly expanding butterfly species
- R5 Tom Oliver Promoting resilient populations in a changing climate
- R6 Lynn Dicks. Linking ecological research to conservation policy and practice: wild bees and farmland wildlife
- R7 Edward Moss. Habitat properties of golden eagle (*Aquila chrysaetos*) territories relative to random sites - a multi scale approach.
- R8 Assaf Shwartz. Motivations for conserving urban biodiversity: facts versus statements
- F1 Duncan Mackay. Does soil seed bank diversity limit post-fire regeneration in small remnants of long-unburnt mallee vegetation?
- F2 Nuria P. Pistón. The effect of cushion-forming prostrate shrubs on biodiversity in the Sierra Nevada Mountains, SE-Spain.
- F3 Aimara Planillo. Over-run while scavenging? Spatial patterns of vertebrate roadkills in three Spanish motorways
- F4 Silvia Ceausu. The wilder the better in biodiversity conservation? Comparing two prioritization approaches in Peneda-Gerês National Park, Portugal
- F5 Nina Wauters. The tropical fire ant *Solenopsis geminata*: a threat to the Galápagos arthropodian fauna

S.28 - POPULATION ECOLOGICAL GENETICS AND GENOMICS. (Room C3). Cristina García (CIBIO, Porto, Portugal) and F. Xavier Picó (Doñana Biological Station, CSIC, Spain)

- O Outi Savolainen. Genetics of colonization and adaptation in *Arabidopsis lyrata*
- R1 Hadrien Lalague. Nucleotide diversity patterns of drought and cold tolerance candidate genes along *Fagus sylvatica* altitudinal gradient
- R2 Karen Cox. Using genome scans and landscape genetics on regional and continental scales to detect temperature-related natural selection in a wind-pollinated tree
- R3 Andrea R Pluess. Drought-adaptation potential in European beech in the face of climate change
- R4 Juan Pablo Jaramillo-Correa. Patterns of population structure and climate adaptation at candidate gene SNPs in a Mediterranean conifer distributed in contrasting environments
- R5 Jerome Duminil. The relative influence of ecological, historical and stochastic processes on genetic diversity distribution of African tropical species: the case of *Erythroleum* (*Leguminosae-Caesalpinioideae*)
- R6 Alfredo García. Islands in the sky: a genome scan over the whole range of a mountain endemic plant
- R7 Maria Clara Castellanos. Genetic consequences of plant facilitation
- R8 Violeta Simón. Genetics explains population differentiation in a sexual dimorphic plant species
- R9 Rafael Albaladejo. Extensive pollen flow but few pollen donors in an extremely fragmented landscape
- F1 Marina de Miguel. Dissection of the adaptive response to drought in *Pinus pinaster*: functional and genetic approaches
- F2 Najat Hannou. First study of variable number of tandem repeats (VNTR) system for Moroccan *Erwinia amylovora* strains
- F3 Raúl Bonal. Trophic specificity and biodiversity of acorn feeding beetles in neotropical and temperate oaks: application of molecular taxonomy



S.29 - SHARING AND HARMONIZING LONG-TERM ECOSYSTEM RESEARCH AND MONITORING ACROSS EUROPE: CONTRIBUTIONS AND EXPERIENCES FROM THE ENVEUROPE LIFE + PROJECT AND THE LTER-EUROPE NETWORK IN 21 COUNTRIES. (Room M3). Mark Frenzel (UFZ, Germany) and Mauro Bastianini (Institute of Marine Sciences Venezia, Italy).

Session sponsored by ENVEurope project.

- O Pierluigi Viaroli. Long term ecological research in practice: challenging the unpredictable in a changing world
- R1 Manuela Coci. Correspondence trials between fresh and marine waters: opportunities from the Enveurope-Long Term Ecological Research Network
- R2 Kimmo Tolonen. Long-term development in the ecological status of Lake Päijänne: pressures and responses
- R3 Viera Straškrábová. Prognosis of climate change effect on ecosystems based on long-term reservoir research
- R4 Thomas Dirnboeck. Carbon budget of a disturbed Norway spruce forest
- R5 Georg von Arx. Spatio-temporal relationships between below-canopy and open-field microclimate
- R6 Iker Pardo. Low impact on plant diversity after 18 years of cattle enclosure in alpine grasslands
- R7 Francesc Llimona. Wildlife long term monitoring in highly pressured LTER nodes: population trends and land use changes
- R8 Ricardo Díaz-Delgado. Remote sensing products to derive LTER landscape ecological indicators
- R9 Francisco Javier Bonet. An environmental indicator system for Sierra Nevada LTER site (Southern Spain): conceptual framework and real implementation
- R10 Mark Frenzel. Conceptual framework for indicator assignment and selection for LTER-sites

S.30 - ECOLOGY AND EVOLUTION OF DISPERSAL IN A RAPIDLY CHANGING ENVIRONMENT: FROM UNDERSTANDING TO CONSERVATION STRATEGIES. (Room M1-2). Dries Bonte (Ghent University, Belgium) and Justin Travis (Aberdeen University, UK)

- O Jenny Hodgson. Arrangements of habitat that facilitate range shifting: beyond stepping stones and corridors
- R1 Maria Delgado. Inertia: the discrepancy between individual and common good in dispersal and prospecting behaviour
- R2 Marjo Saastamoinen. A trade-off between dispersal and immune function in the Glanville fritillary (*Melitaea cinxia*) butterfly
- F1 Ellyn Bitume. Effects of density and genetic relatedness on the dispersal kernel in *Tetranychus urticae*
- F2 Katrien Van Petegem. Correlated responses of selection for aerial dispersal in *Tetranychus urticae*
- F3 Kamil Barton. Population consequences of movement behaviour in patchy landscapes
- R3 Luc Lens. Genetic signature of population fragmentation in a Kenyan cloud forest archipelago: a temporal approach
- R4 Luis Santamaria. Modeling seed shadows in zoochorous systems: steps towards an integrated approach
- F4 Helene Imbert. Ontogenetic shift in dispersal tactics and habitat preferences of the European eel: Role of social interactions?
- F5 Morueta-Holme. Role of long-term history for plant species distributions across the Panama land bridge



- F6 Christian Hof. Should I stay or should I go? - Rethinking species' responses to rapid climate change
- R5 Isabelle Boulangeat. Assessing the importance of dispersal related mechanisms in determining the spatial patterns of the abundance of species
- R6 Thomas Delattre. Climate-dependence of landscape effects on dispersal behavior
- F7 Toos van Noordwijk. Integrating species life-history traits and landscape connectedness to identify dispersal bottlenecks and solutions for habitat fragmentation
- F8 Rebecca Lange. Determinants of bush-cricket mobility - fixed or plastic?
- F9 Marleen Cobben. Evolution and distribution of dispersal probabilities in metapopulations under climate change
- R7 Greta Bocedi. A modelling framework for linking individual-based population dynamics and functional connectivity to predict and manage species responses to environmental changes.

15:00-17:30 Wednesday afternoon parallel sessions

S.31 - APPLICATIONS OF ECOLOGICAL MODELS IN BIODIVERSITY CONSERVATION AND MONITORING IN A RAPIDLY CHANGING WORLD. (Room C2). Joana Vicente (Universidade do Porto, Portugal) and Ângela Lomba (CIBIO - Universidade do Porto, Portugal).

- O Henrique Miguel Pereira. Modeling the response of biodiversity to global change: challenges and perspectives
- R1 Christophe Randin. European deciduous tree species are currently filling their thermal niche: implications for climate change projections
- R2 Rita Bastos. Testing the application of a spatially-explicit dynamic model to an endemic engendered bird (*Pyrrhula murina*) under scenarios of laurel forest management in the Azores
- R3 Diogo Alagador. Rome wasn't built in a day - Scheduling protected area selection to assist climatic species range adjustments
- R4 João Honrado. Optimizing the conservation and monitoring of Iberian biodiversity under scenarios of ecological change
- R5 María Triviño. Environmental change and conservation priorities in the Iberian Peninsula
- F1 Cristina Herrero. Does agriculture intensification spare land for nature? A new methodology to overcome scale limitations
- F2 Cristiana Vieira. Ensemble forecasting of distribution shifts for fluvial bryophytes in Portugal under scenarios of climate and fluvial changes
- F3 Takuya Iwamura. The impacts of sea level rise on the East Asian-Australasian migratory shore-bird flyways: graph theoretical approach

S.32 - ECOLOGICAL AND ECOTOXICOLOGICAL EFFECTS OF OIL SPILLS AND PLASTICS IN THE MARINE ENVIRONMENT. (Room M3). Lúcia Guilhermino (University of Porto, Portugal) and Paula Sobral (Universidade Nova de Lisboa, Portugal).

- O Ketil Hylland. Oil and plastics: current and future concerns for marine ecosystems
- R1 Josep Bayona. New developments for risk assessment of oil spills in the marine environment
- R2 Luis Soto. Monitoring long-term environmental effects of the Louisiana oil spill in the nW coast of Mexico
- R3 Lúcia Guilhermino. Why short-term exposure of marine organisms to oils is ecologically relevant?
- R4 Leslie Heather. How can we measure tiny bits of plastic in a big sea?



- R5 João Garcez Luís de Frias. Temporal analysis of microplastics concentrations in plankton samples
- F1 Marcelo Azevedo. Single and combined effects of na oil component (fluoranthene) and a noxious and hazardous substance (aniline) to the marine microalgae *Tetraselmis chui*.

S.33 - MEDITERRANEAN FORESTS AND GLOBAL CHANGE. (Room CAM). Enrique Doblas-Miranda (CREAF, Autonomous University of Barcelona, Spain), Javier Retana, (CREAF, Autonomous University of Barcelona, Spain) and Fernando Valladares, (MNCN-CSIC, Spain).

- O Enrique Doblas-Miranda. Threats and opportunities of global change for Mediterranean Basin ecosystems
- R1 Lluís Brotons. Land use change consequences for biodiversity
- R2 Jordi Martínez-Vilalt., Drought and Mediterranean forests
- R3 Josep Peñuelas. Feedbacks between forests and the atmosphere
- R4 Joan Pino. Mediterranean woodlands: are they really resistant to plant invasions?
- R5 Miguel Ángel de Zavala. Assessment of Forest Vulnerability and Resilience through ecological models
- F1 Hervé Jactel. Drought effects on damage by forest insects and pathogens: a meta-analysis
- F2 Anna Lupon. The “Birch effect” and the soil nitrogen cycle in Mediterranean forests: from the hillslope to the riparian zone
- F3 Ignacio González-Fernández. How to apply Ozone critical levels for Southern European vegetation communities?

S.34 - STRESS ECOLOGY OF SOIL INVERTEBRATES. (Room M1-2). Péter Nagy (Szent István University, Hungary), Erzsébet Hornung (Szent István University, Hungary) and Thomaé Kakouli-Duarte, (Institute of Technology Carlow, Ireland).

- O Katalin Szlavecz. Disturbance and stress in urban soils
- R1 Elisabeth Hornung. Isopoda reproduction as an indicator of environmental stress
- R2 Christelle Puvot. The use of fluctuating asymmetry analysis to evaluate the effects of metal-pollution (Cd, Pb, Zn) on *Porcellio scaber* (Crustacea, Isopoda). Living in contaminated muddy habitat
- R3 Péter Nagy. Soil zoological studies on the recultivation after the red mud pollution in Kolontár, Hungary
- R4 Van Thanh Nguyen. Temporal changes in soil nematode community structure under heavy metal stress in an Irish mining site
- R5 Jean-Jacques Brun. Direct and combined impacts of fire and drought stresses on earthworm community in a mediterranean ecosystem
- F1 Peter Salamun. Deterioration of soil environment in the vicinity of metallurgical plant Kovohut.
- F2 C. Guillermo Bueno. Effects of changing traditional grazing activities and wild boar rooting on alpine earthworm communities in Central Pyrenees.

S.35 - ADVANCES IN ECO-HYDROLOGY. (Room C3). Juan Puigdefabregas (EEZA-CSIC, Spain).

- O Anthony O’Grady. Can we predict groundwater discharge using ecological optimality?
- R1 Nei Leite. Fluxes of dissolved carbon on a riparian forest in the Western Amazonia, Brazil
- R2 Sergio Contreras. Enhanced Vegetation Index from MODIS and rainfall as predictors of actual evapotranspiration in two dryland sites at SE Spain
- R3 Patricia Saco. Connectivity and degradation in semi-arid systems: patterns, thresholds and feedback effects



- R4 Yudy Azucena Camacho. Spatial pattern, diversity, and water balance in semiarid mediterranean plant communities. A microcosm experiment.
- R5 Xiaohua (Adam) Wei. Quantifying the relations between forest changes and water at a large spatial scale
- F1 Yolanda Pueyo. Plant community patterns and the strength of the plant-water infiltration feedback in semi-arid ecosystems.
- F2 Olga María Ucles. Dewfall deposition on contrasted slope aspects in a badlands ecosystem in SE Spain
- F3 Sonia Chamizo. Relationship among biological soil crusts, rainfall characteristics and runoff at plot and hillslope scales

S.36 - CLIMATE CHANGE, EXTREME EVENTS AND ALPINE ECOSYSTEM RESPONSES. (Room C1). Laszlo Nagy (The National Institute of Amazonian Research, Brazil)

- O Christian Koerner. Global Change and high elevation biota
- F1 Stuart Harris. Climatic change, extreme events and alpine ecosystems response in western Canada during the last 15ka
- F2 Thomas Wolgemuth. Lessons to learn from impacts of 2003-heatwave on vegetation in a central Alpine valley
- F3 Jean-Philippe Bizoux. Effect of the 2003 heatwave on *Eryngium alpinum* under different management regimes
- R1 Michael Gottfried. Buffer capacity of alpine plants against extremely warm summers
- R2 Lohengrin Cavieres. Freezing resistance in high and low elevation plants in the central Chilean Andes: possible consequences of climate change
- R3 Julien Pottier. Modelling alpine biodiversity response to climate: are all dimensions equally well predicted from species distribution models?
- R4 Marie-Lise Benot. Land-use vs. climate change: do they both represent a threat to subalpine grasslands? A test on the dominant *Festuca paniculata* (L.) Schinz & Thell.
- F4 Clinton Carbutt. Probable effect of warming on nitrogen mineralization in the Drakensberg Alpine Centre, southern Africa
- F5 Samuel Schmid. Impact of experimentally induced summer drought on ecosystem processes in alpine grassland
- F6 Johan Olofsson. Disease-mediated vegetation shifts influence the effect of climate change on carbon fluxes

Poster circuit

19:15-20:00 Monday - 17:30-19:30 Tuesday - 18:30-19:30 Wednesday

Late afternoon poster sessions every day will provide an opportunity for discussion in a relaxed setting after completion of oral sessions. Posters are displayed during all the congress, and interested persons can view the poster even when the author is not in attendance.

They are ordered by sessions which are also organized following a guided circuit in order to assist in their localization (see 28 and 29 pages.) Staking system are supplied and are the only method for attaching the poster to the board. The format requested: Width 85 cm / Height 120cm.

Posters can be attached immediately after registration where information on localization will be provided. Dismounting will be opened on Wednesday evening.



8:30-19:30 Thursday

Picnic meal will be provided. Please arrive 15 minutes early and don't forget to bring a hat, sunscreen and comfortable gear. Meeting point: Front Parking site of the Venue.

FIELD TRIP 1 : ARANJUEZ EXPERIMENTAL STATION AND GYPSUM ENVIRONMENTS OF THE SOUTH OF MADRID.- CANCELLED

We will visit the Aranjuez experimental station, where different experiments focusing on biological soil crusts and vascular plants are being carried out, as well as different gypsum outcrops located in the south of the Madrid region.

FIELD TRIP 2: SIERRA DE GREDOS - With the collaboration of The Junta of Castilla y León

Brief description: This vast mountain range is the highest in central Spain, running through the provinces of Ávila, Salamanca and Cáceres. A Regional Natural Park is situated in the southern part of the province of Ávila and encompasses the highest altitudes of the mountains (above 2500 m.a.s.l) with high mountain Mediterranean landscapes. The Gredos mountains have been also designated as an Important Bird Area (IBA) and is part of Red Natura 2000, offering a good opportunity to encounter a variety of soaring birds of prey overhead and also Spanish Ibex (*Capra pyrenaica*), which is particularly abundant and very easy to see in this area.

Two alternative itineraries have been prepared in order to fulfill the necessities and physical conditions of the participants. The first would require a better physical condition since we will go up to the Morezón Peak and then down by a steep and difficult trail to the Laguna de Gredos from where we will return to the Bus parking. The second, also to the Laguna de Gredos, will be easier through a well marked and maintained trail. Any case it will cross the Barrerones pass which is located close to 400 m up the departing point.

FIELD TRIP 3: SIERRA DE GUADARRAMA - With the collaboration of The Junta of Castilla y León

Brief description: A mountain range forming the eastern half of the Sistema Central at the centre of the Iberian Peninsula and located between the Sierra de Gredos in the province of Ávila, and Sierra de Ayllón in the province of Guadalajara. These mountains constitute some of the region's most spectacular landscapes with a high diversity of flowers and animals of great ecological value, a treeline consisting of stunted Scottish pines (*Pinus sylvestris*) and relict juniper forests (*Juniperus thurifera*) in the piedmont.

FIELD TRIP 4: VALLE DEL TIÉTAR - With the collaboration of The Junta of Castilla y León.- CANCELLED

Brief description: Placed in the south of Gredos Mountains, this large valley is crossed by River Tiétar and surrounded by "dehesas" of holm oaks, Mediterranean *Pinus* woodland and grassland, cork oaks and a complete panoplia of Mediterranean communities. This is an important site for endangered breeding raptors and *Ciconia nigra*.

FIELD TRIP 5: VALLE DE IRUELAS - With the collaboration of The Junta of Castilla y León

Brief description: The Iruelas Valley is a beautiful Natural Reserve which is located in most eastern tip of the Sierra de Gredos. It is a north oriented valley where typical Mediterranean and well conserved forests are found. There we can hike under the canopy of Mediterranean oak forests (*Quercus pyrenaica*) but also mature pine forests dominated by different pine species (*Pinus pinaster*, *Pinus nigra*) where we can easily find outstanding and very old trees. Ravines and gorges are covered by alder and ash tree forests. In advance the reserve is famous by the endangered fauna it shelters, such as black vultures (*Aegypius monachus*) and Imperial eagle (*Aquila adalberti*) which can be easily seen in the Iruelas skies.

* Note: Please be aware a minimum of 35 reservations will be necessary for launching each one of them. Therefore the Organizers have reserved the right to suspend the trip if the number of seats required is not reached. In that case, attendees could have another available field trip if or apply for refunding.



17:30 Tuesday, Cámara Room (CAM)

ECOLOGICAL AWARD: ERNST HAECKEL PRIZE

This prize is awarded the first time in 2011. It is designed to honour a senior ecologist for an outstanding contribution to European ecological science.

The winner of the Ernst Haeckel Prize is invited to deliver an opening plenary, key-note lecture at the biennial EEF Congress and is also presented with a certificate and medal. The speakers' travel expenses and accommodation costs are covered by the award, allowing them to attend the Congress.

Procedure for nomination:

Each EEF Member Organisation is invited to submit one nomination for the Ernst Haeckel Prize Lecture. Ecologists from anywhere in the world can be considered and the nominee need not necessarily belong to an EEF Member organisation.

Nominations must be submitted to the EEF Council (info@europeanecology.org) by 1st December in the year before the EEF Congress (1st December 2012, for the EEF Congress in London).

Nominations must be made using the award nomination form (available at <http://www.europeanecology.org/prizes/>) and should contain information on research interests, the nominee's contribution to the science of ecology and/or its application, his/her status within the biological community and key publications. It should also contain a clear statement on why the nominee deserves the award. The nominee will be informed about his nomination by the president of the EEF.

STUDENTS' EUROPEAN ECOLOGY PRIZE

During the EEF Congress the Federation awards the 'Students' European Ecology Prize' to honour the best oral contribution presented by a student participant. Abstracts submitted to the Congress by students (as first author and presenter) will be pre-reviewed by a committee of the EEF and a selected number of talks will be evaluated by committee members during the conference. The quality of the submitted extended abstract is very important in determining consideration for the Prize.

The prize is endowed with 200 € and a free publication in WebEcology.

(See also <http://www.europeanecology.org/prizes/>)

Web Ecology Presentation

18:00 Tuesday, Cámara Room (CAM)

WEB ECOLOGY is an electronic peer-reviewed journal issued by the European Ecological Federation (EEF) in cooperation with the Oikos Editorial Office in Lund, Sweden and starting 2011 by Copernicus Publications, Göttingen, Germany.

As the EEF official journal, ecologists from all over Europe and, as a matter of fact, from all countries of the world are invited to publish original results on its pages. WEB ECOLOGY publishes studies and reviews from all fields of ecology, theoretical and empirical, pure and applied. There is no bias regarding taxon, biome or geographical area.

Come and get to know about the advantages of publishing in WEB ECOLOGY!



17:30-19:30 Tuesday, Conference Room 3 (C3)

EDUCATION FORUM. Chaired by Andras Baldi

1. Introduction from EEF Council
2. Perspectives across Europe (10 minutes each speaker)
 - UK (Libby John)
 - Germany (Karin Ulbrich)
 - Spain (Maria Jose Leiva)
 - Italy (Simona Castaldi)
 - Sweden (Ander Telenius)
 - Slovakia (Pavol Elias)
 - France (TBC (Christophe Tebaud))
3. Common concerns and priorities, open discussion
4. Education Forum focus for 2011/12
 - Research to be gathered
 - Actions required by group
 - Communication strategy
- 5.- Closing statements and next steps

18:30-19:30 Tuesday, Cámara Room (CAM)

EEF ANNUAL MEETING

18:30-19:30 Tuesday, Conference Room 2 (C2)

AEET ANNUAL MEMBERS MEETING

JOURNAL RELAUNCH

Call for Paper

Web Ecology

www.web-ecology.net

Editor-in-Chief Francisco I. Pugnaire
Managing Editor Jutta Stadler

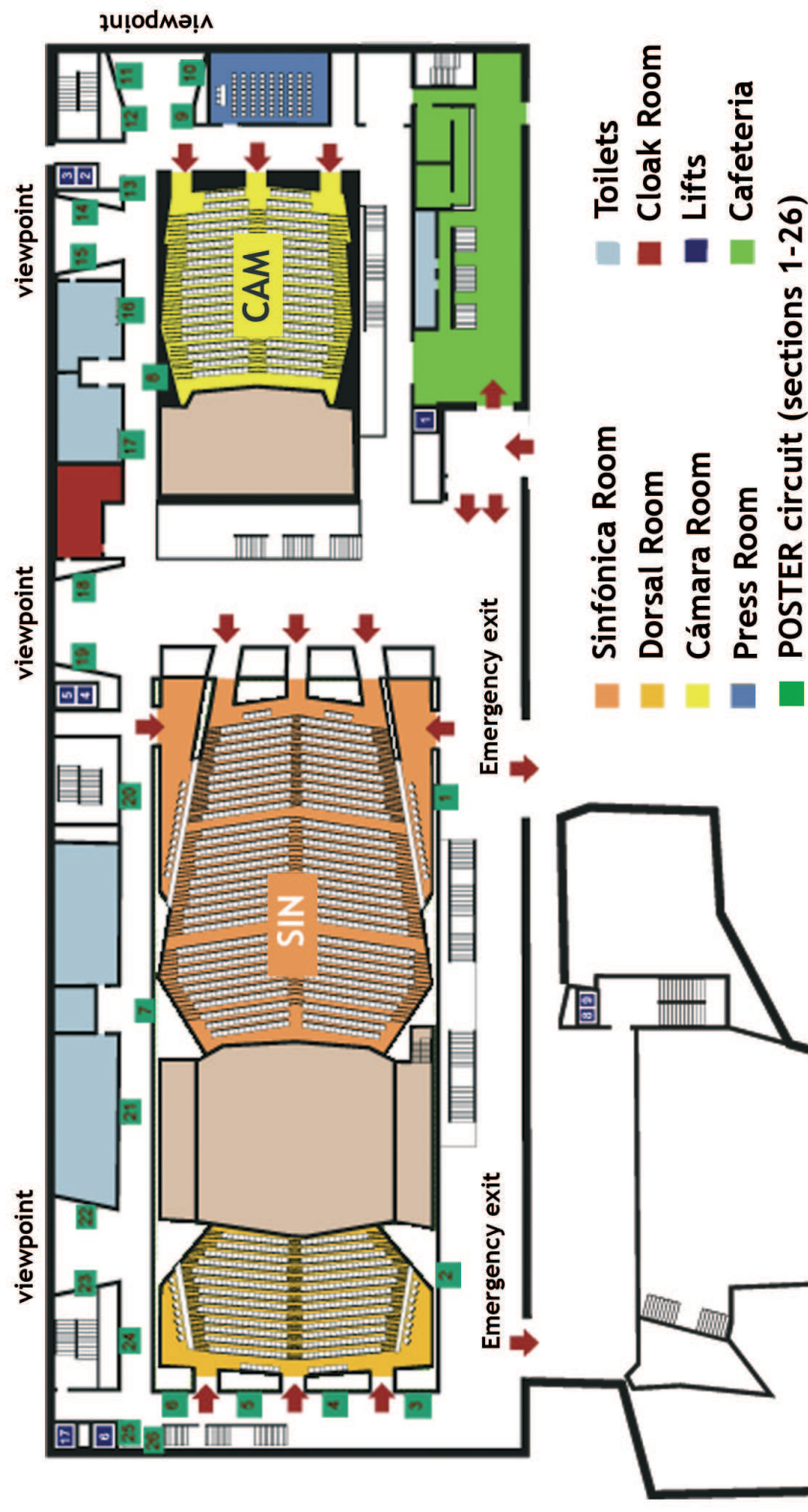
Please visit our booth at the 2011 EEF Congress.

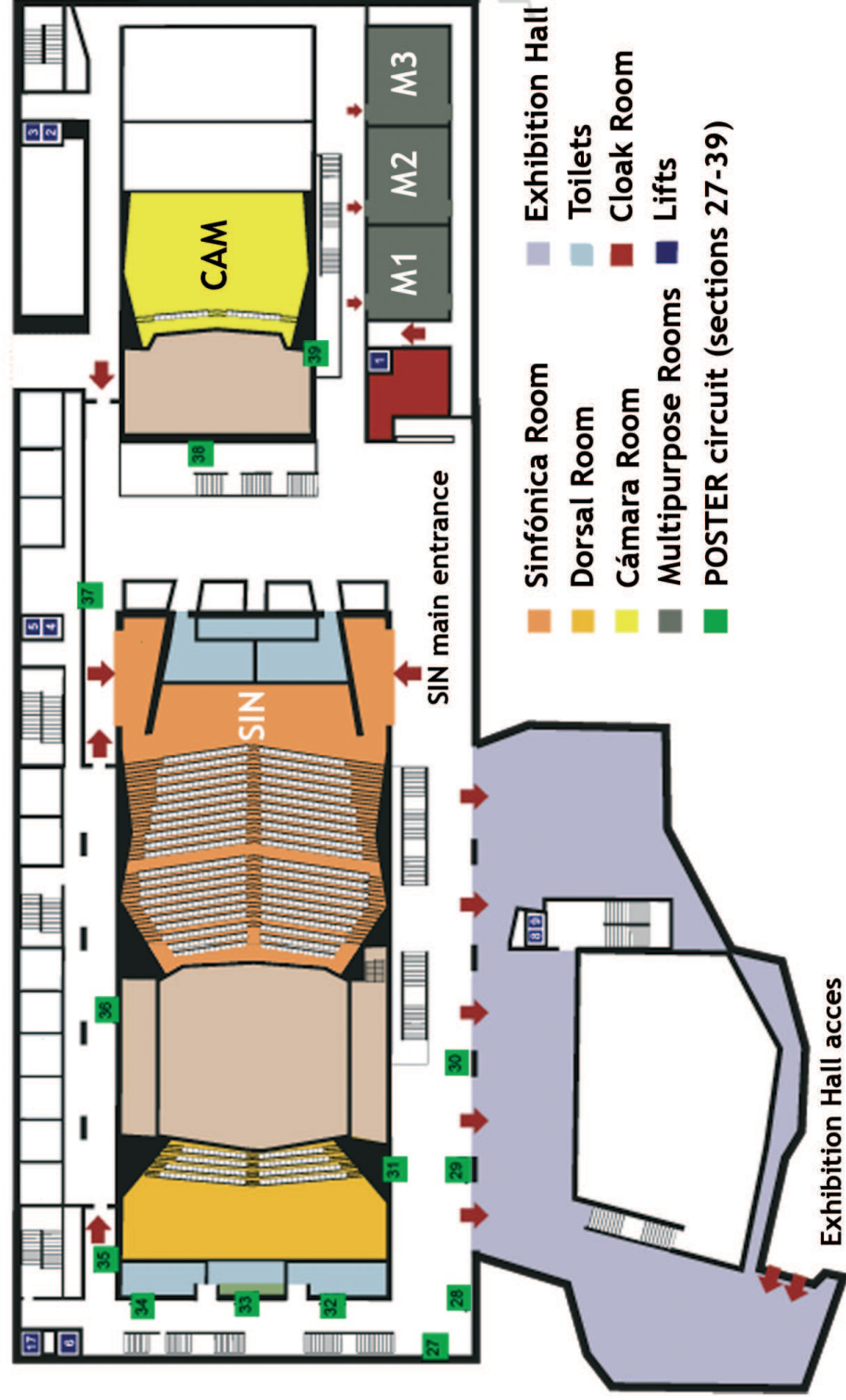
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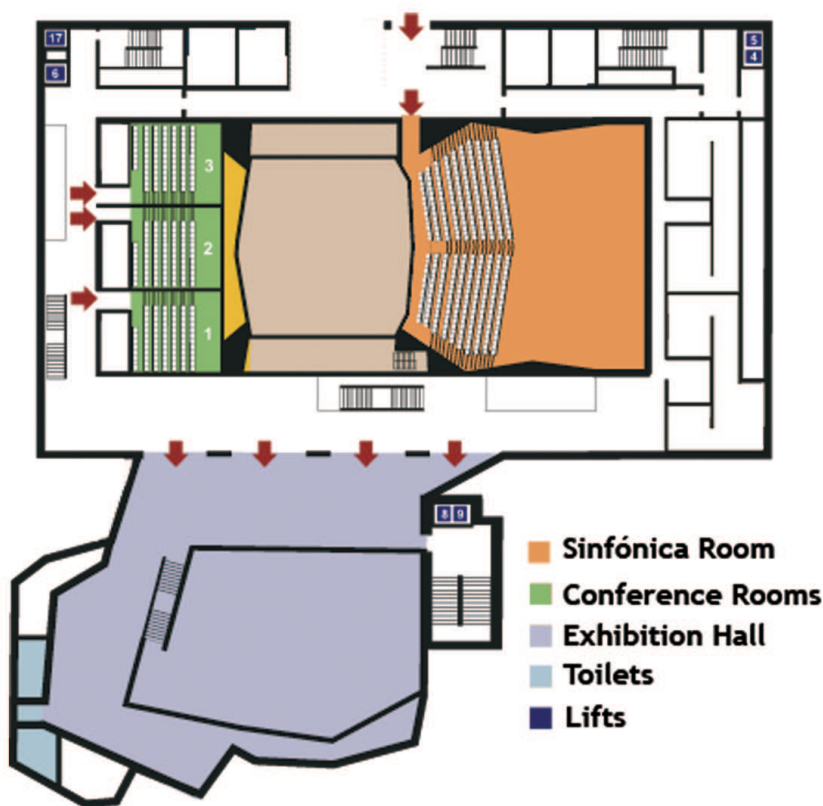
Ground floor







-2 floor



Social activities

Every morning break, Ground floor

COFFE, TEA AND REFRESHMENT

Courtesy of The EEF Congress Organization

In charge of CAFÉ NORTE Restaurant.

13:30 on Monday, 12:45 on Tuesday and Wednesday, Exhibition Hall

DAILY LUNCH

In charge of CAFÉ NORTE Restaurant.

Since we are aware of the difficulties to find available restaurants for all the attendees during the lunch break due to the relatively small size of Ávila and the reduced time slot, the Organization has managed to make available a complete lunch catering in the venue. If you have reserved this service in advance come and join us in the Exhibition Hall at Lunch times. If not, please ask in Secretariat for available seat. In your delegate bag you will find useful information about nearby or typical restaurants. Enjoy your meal!



20:30 Monday, Exhibition Hall

WINE RECEPTION - GET TOGETHER

Courtesy of Spanish Association for Terrestrial Ecology (AEET) and Ecography

Join us and enjoy a drink or a refreshment and try some typical Spanish *Pinchos*, CAFÉ NORTE Restaurant.

21:30 Wednesday, Exhibition Hall

CONFERENCE DINNER

Tasting regional food. In charge of CAFÉ NORTE Restaurant.

from 23:30 Wednesday, Cafetería

AT NIGHT

Two atmospheres. Music-bar and Disco pub

Every day

ÁVILA GUIDED TOURS

Courtesy of Ávila Town Hall

Different turns of Guided Tours, in English and Spanish, will be available each day. Look for the one that fits you better and book your visit in the Congress Secretariat office.

Advise for speakers and chairpersons

There will be limited time for each talk. Please make sure to stay on time! The chairpersons are requested to take over the responsibility for correct start and end of each time slot!

The conference rooms are equipped with video projectors and Windows computers (XP Professional) to allow PowerPoint or OpenOffice presentations (it will not be possible to use your own computer). We provide MS Office Version 2003 and OpenOffice 2.4.

To minimize potential incompatibilities between the software versions you use and those we use to display the presentations, we recommend limited use of animation, use of common Windows fonts for text and symbol fonts for equations. There will be no Macintosh computer. Please make sure that your presentation can run on a Windows computer.

Please provide your presentations on a USB memory stick to the responsible staff (will be indicated at the reception) best on Monday (or asap on the other days) during the registration time (9.00 am to 6.00 pm) to load the files on our computers.

Very important: Take care that the time lag between your presentation and the handing over of your file is sufficient to give us enough response time if there are problems with your files. Please indicate if your presentation includes sound or video clips.

Please don't arrive in the last minute!



Ironically bringing together over a thousand of the very best scientific minds to discuss global ecology can have a negative impact on the global and local environment. We have been working together with consultants MCI Sustainability Services to reduce our carbon emissions, lower our waste, reduce our consumption of resources, and develop more local trade and commerce. This commitment to managing a sustainable congress, aims to provide a healthier more authentic and Avilian event experience.

We invite all event attendees to participate in sustainable practices during EEF: Reduce, Reuse, Recycle and Offset. Offsetting is a voluntary way of combating climate change by funding sustainable projects all over the world. The EEF has selected some different development and cooperation projects, you will have the chance to choose which project your donation will be assigned to.

ACKNOWLEDGMENTS

We would like to express our gratitude to all those who has given us the possibility to configure and prepare this exciting program: Honorary, Scientific and Working Committees, Session Chairmans, all Sponsors and Collaborators, MCI-group agency, in charge of the logistic and the Technical Secretariat, and of course, to all people who has submitted a contribution and to all attendees.

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