

	<u>Biennial conference of the Nordic Society Oikos 2024</u>		
	New perspectives in ecological and evolutionary research		
Tuesday 12th March 2024 – Arrival day			
Time	Activity	Locality	
09:00-17:00	Herbivory network workshop	Ecology building, Heden	
12:00-13:00	Arrivals / Registration	Ecology Building, Entrance hall	
13:00-17:00	Planetary Biology workshop	Ecology building, Ängen	
13:30-15:30	Scientist Rebellion workshop	Biology Building, Cerebrum	
14:00-17:00	PhD-student workshop: Visuals in Science	Ecology building, Red room	
17:00-20:00	Registration	Ecology Building, Entrance hall	
17:00-20:00	Welcome reception	Ecology building foyer	
Wednesday 13th March 2024 – Day 1			
Time	Activity	Locality	
08:30	Welcome	Stora Salen, AF-borgen	
08:40	Planetary Biology Plenaries	Stora Salen, AF-borgen	
	08 ⁴⁰ --- Kathrine McMahon : Ecogenomics of freshwater microbial communities 09 ²⁰ --- David Wardle : Biodiversity change and ecosystem processes: where we are at and where to from here		

10:00	Morning fika	AF-Borgen
10:30	S1a Planetary Biology: Exploring and understanding biodiversity	Stora Salen, AF-borgen
	<p><i>Chair: Olga Vinnere Petterson</i></p> <p>10³⁰ --- Niittynen, P.: Global occurrence and productivity characteristics of snowbed habitats</p> <p>10⁴⁵ --- Kajanus, M.H.: Generating practical biomonitoring outputs from high-throughput data: state-of-the-art methodologies and knowledge gaps</p> <p>11⁰⁰ --- Auffret, A.: Interactions of climate and land-use change as drivers of broad-scale biodiversity change in the anthropocene</p> <p>11¹⁵ --- van Klink, R.: Global data synthesis reveals that disproportionate declines of formerly abundant species underlie insect loss</p> <p>11³⁰ --- Montalvo Mancheno, C.: The potential evolution of Sweden's boreal forest through biodiversity-focused development in the 21st century</p> <p>11⁴⁵ --- Barel, J.: Plant community turn-over in European raised bogs along enviro-climatic gradients</p>	
	S2 Ecological and evolutionary solutions to the biodiversity crisis	Palaestra A
	<p><i>Chair: Mikael Pontarp & Martin Eriksson</i></p> <p>10³⁰ --- Nolen, Z.: Historical butterfly genomes highlight species-specific genomic consequences of grassland conversion and abandonment</p> <p>10⁴⁵ --- Christiansen, D.M.: Using the past to inform the future: characterizing extinction risks of the Danish flora</p> <p>11⁰⁰ --- Lazarus, F.: Quantitative spatial variation of plant communities along a landscape gradient in Central Norway</p> <p>11¹⁵ --- Bras, A.: Effects of habitat fragmentation per se on the genetic diversity of the Glanville Fritillary Butterfly</p> <p>11³⁰ --- Boetzl, F.: Grasslands and crop fields are complementary for biodiversity irrespective of landscape grassland cover</p> <p>11⁴⁵ --- Smith, H.: Can we reach the dual biodiversity goals of preserving rare and ecosystem service provisioning species in farmland</p>	
	S3a Ecological and evolutionary consequences of species interactions	Palaestra B
	<p><i>Chair: Magne Friberg</i></p> <p>10³⁰ --- Gross, K.: Components of local adaptation and divergence in pollination efficacy in a coevolving species interaction</p> <p>10⁴⁵ --- Ottocento, C.: The evolution and ecological drivers of variation in chemical defences in the wood tiger moth (<i>Arctia plantaginis</i>)</p> <p>11⁰⁰ --- Thomsen, K.: Temperature-dependent influence of aphid endosymbionts on ladybug predation efficiency</p> <p>11¹⁵ --- Susheel, A.: Insect communities in Italian <i>Arabis alpina</i> populations with diverging scent profiles</p>	

	<p>11³⁰ --- Opedal, Ø.: A functional view on pollinator-mediated floral evolution</p> <p>11⁴⁵ --- Hartvig, I.: Host-microbiome interactions affect ecology and evolution of orchids</p>	
	S4 Environmental threats from pollution and pesticides	Kerstinsalen, AF-Borgen
	<p><i>Chair: Charlie Nicholson</i></p> <p>10³⁰ --- Serrana, J.: Seasonal dynamics of wastewater-impacted river microbiomes and its influence on organic pollutant degradation</p> <p>10⁴⁵ --- Garcia Dominguez, S.: How does exposure to soot, a common urban air pollutant, affect birds and bumblebees? A physiological perspective</p> <p>11⁰⁰ --- Herrada, A.: Disruption of oxidative balance due to heavy metals exposure in a wild ungulate</p> <p>11¹⁵ --- Kivelä, L.: Long-wavelength artificial light attracts male common glow-worms</p> <p>11³⁰ --- Nyquist, C.: Impacts of aquatic pollution on pollinator health and activity</p> <p>11⁴⁵ --- Kaakinen, K.: Effects of glyphosate and glyphosate-based herbicide on learning and memory of the buff-tailed bumblebee</p>	
12:00	Lunch	AF-Borgen
13:00	Plenary -- Marcel Visser: New perspectives in ecological and evolutionary research on avian seasonal timing	Stora Salen, AF-borgen
13:45	Break	
13:55	S1b Planetary Biology: Exploring and understanding biodiversity	Stora Salen, AF-borgen
	<p><i>Chair: Olga Vinnere Petterson</i></p> <p>13⁵⁵ --- Bertilsson, S.: Introduction to Planetary Biology: a planetary perspective on biodiversity</p> <p>14¹⁰ --- Baastrup-Spohr, L.: Global drivers of aquatic plant height</p> <p>14²⁵ --- Webster, M.: Genome variation in arctic bumblebees</p> <p>14⁴⁰ --- Arnell, M.: Large scale range dynamics of vascular plant species in Sweden</p> <p>14⁵⁵ --- Zhao, L.: Microbial community diversity in coastal northern Baltic Sea revealed by metagenomic analyses</p> <p>15¹⁰ --- Wagenaar, L.: The effects of forest structure on biodiversity</p>	
	S3b Ecological and evolutionary consequences of species interactions	Palaestra A
	<i>Chair: Magne Friberg</i>	

	<p>13⁵⁵ --- Pelikan, L.: Duration of coexistence with a novel type of invasive predator increases survival of <i>Idotea balthica</i></p> <p>14¹⁰ --- Weinbach, A.: One-sided population decline triggers eco-evolutionary interaction disinvestment in a 2-species mutualistic system</p> <p>14²⁵ --- Kamenova, S.: Arctic greening drives changes in the diet and gut microbiome of a resident herbivore with consequences for fitness</p> <p>14⁴⁰ --- Braga, M.: Inferring the distribution of interactions: bringing evolution into models of joint species distribution</p> <p>14⁵⁵ --- Sousa Ferreira, M.: The role of introgression from Pacific to spring-spawning Baltic herring to adaptation to a novel environment</p> <p>15¹⁰ --- Hermansson, I.: Breeding dispersal in an endangered sea duck under increased predation risk</p>	
	<p>S5 Open session 1</p>	<p>Palaestra B</p>
	<p><i>Chair: Cristina Máguas</i></p> <p>13⁵⁵ --- Traylor, W.: Modeling large grazers of the mammoth steppe</p> <p>14¹⁰ --- Jones, O.: Enhancing reliability in matrix population models: from uncertainty propagation to simulation with mpmsim</p> <p>14²⁵ --- Muriel, J.: Fine-scale variation in gut microbiome in the pied flycatcher in central Spain</p> <p>14⁴⁰ --- Fragata, I.: Evolution in abiotic environments shapes species coexistence</p> <p>14⁵⁵ --- Hart, A.: Adaptation to heat via changes in life history deepens the agricultural impact of widespread insect pest</p> <p>15¹⁰ --- Opdal, A.F.: Terrestrial greening and coastal browning delay spring bloom and fish spawning</p>	
	<p>S6 Effects of anthropogenic land-use changes on ecology and evolution</p>	<p>Kerstinsalen, AF-Borgen</p>
	<p><i>Chair: Friederike Gehrmann</i></p> <p>13⁵⁵ --- Koivusaari, S.: The effects of climate and land use change on population persistence of a red-listed plant species in Finland</p> <p>14¹⁰ --- Myrsky, E.: Vegetation development decades after historical land-use at two levels of habitat fertility in sub-arctic tundra</p> <p>14²⁵ --- Pacheco, C.: The influence of human landscape modification and geomorphology on Iberian wolf population genetic structure</p> <p>14⁴⁰ --- Bäckroos, S.: Impact of light pollution on reproduction in the threespine stickleback</p> <p>14⁵⁵ --- Millett, J.: Grazing impacts on dune wetland plant community biodiversity over a half-century in a replicated long-term experiment</p> <p>15¹⁰ --- Thitz, P.: Impacts of vegetation diversity on invertebrate fauna and microbial communities on agroecosystems</p>	

15:25	Afternoon fika	AF-Borgen
16:00	S7 Oikos: Discussion – Advancing ecology: How has ecology advanced during the last 10 years? And where is it heading next? Where should it head next?	Stora Salen, AF-borgen
	<i>Chairs: Åsa Langefors, Dries Bonte, Pedro Peres Neto & Isabel Barrio</i>	
	S8 Evolutionary biology	Palaestra A
	<i>Chair: Anna Runemark</i> 16 ⁰⁰ --- Tack, A.: The phenological landscape and oak-associated food webs 16 ¹⁵ --- Goodall, J.: Atlantic herring – hidden biodiversity in the Baltic Sea 16 ³⁰ --- Squires, T.: Genomic offset for rock ptarmigan in response to climate change 16 ⁴⁵ --- Stewart, R.: Limited expression plasticity in highly specialized flies evolving to exploit a novel host plant 17 ⁰⁰ --- Bisschop, K.: The relative importance of variation in deterministic and stochastic processes in the repeatability of fitness evolution 17 ¹⁵ --- Niu, J.: Whole genome analyses of archival specimens to understand demography and thermal adaptations in a wild fish population	
	S9 EEf session: Ecology meets evolution	Palaestra B
	<i>Chair: Inêz Fragata</i> 16 ⁰⁰ --- Jacobsen Ellerstrand, S.: Sex-specific fitness of large sex chromosomes under extreme demographic scenarios 16 ¹⁵ --- Winslott, E.: Effects of the environment and individual age on predator avoidance in the green tortoise beetle 16 ³⁰ --- Nilén, S.: Fluctuating environments and context-dependent pre-mating isolation in the early stages of population divergence 16 ⁴⁵ --- Lund-Hansen, K.: Is there a difference in prezygotic isolation between populations of <i>Drosophila melanogaster</i> ? 17 ⁰⁰ --- Li, Q.: Nutrient landscape shapes the transition between unicellular and multicellular green algae 17 ¹⁵ --- Tsuboi, M.: On a reciprocal role of ecology and evolution for evolutionary predictions	
	S10 Pollination	Kerstinsalen, AF-Borgen
	<i>Chair: Øystein Opedal</i> 16 ⁰⁰ --- Alexandersson Ros, K.: Does floral traits mechanically limit buzz-pollinating bees? 16 ¹⁵ --- Sepulveda, G.: The impact of simulated heatwaves on bumblebee pollination effectiveness 16 ³⁰ --- Hildesheim, L.: Joint evolution of pollen longevity and mating system: predictions and empirical tests 16 ⁴⁵ --- Winther, L.: Unravelling patterns and drivers of pollen longevity across diverse plant species and environments	

	17 ⁰⁰ --- Krausl, T.: Effects of pollinator declines on grassland plant communities in two experimental platforms 17 ¹⁵ --- Torres-Vanegas, F.: A mosaic of local pollinator assemblages underlies floral trait divergence in a pollination-generalized plant	
17:30	Poster session 1	AF-Borgen
All day	Posters available	AF-Borgen
Thursday 14th March – Day 2		
Time	Activity	Locality
08:30	Information	Stora Salen, AF-borgen
08:45	Ernst Haeckel award plenary -- Helena Freitas: Advancements in ecological science within agri-food systems	Stora Salen, AF-borgen
09:30	Morning fika	AF-Borgen
10:00	S11 Hans Kristianssons minnessymposium: Open session zoology	Stora Salen, AF-borgen
	<i>Chair: Anna Runemark</i> 10 ⁰⁰ --- Romeo, C.: Differential patterns of gut microbial diversity along urbanisation gradients in a native-invasive vertebrate system 10 ¹⁵ --- Pärssinen, V.: Evolution of female ornamentation in dance flies: are valuable gifts worth dressing up for? 10 ³⁰ --- Ventura, S.: Does hard work pay off? The trade-off between great tits' present and future reproductive success under climate change 10 ⁴⁵ --- Stalder, D.: Optimal time of migration in trout is a result of timing-dependent future growth and predation risk 11 ⁰⁰ --- Klumpp, M.V.: Sex makes the difference: Immune function predicts local survival in a wild bird species, but the effect depends on sex 11 ¹⁵ --- Hegemann, A.: Early-life sicknesses as drivers of animal movement later in life 11 ³⁰ --- Queiros, Q.: Predicting foraging trips of the world's seabirds 11 ⁴⁵ --- Hillström, L.: Capercaillie and effects of predation on reproduction: an experimental test	
	S12 Ecological and evolutionary responses to a changing environment	Palaestra A
	<i>Chair: Michael Tobler</i> 10 ⁰⁰ --- Ittonen, M.: Winters restrict a climate change-driven butterfly range expansion despite rapid evolution of two	

	<p>seasonal timing traits</p> <p>10¹⁵ --- Tidière, M.: An indicator of population welfare based on survival rates to monitor demographic consequences of changing environments</p> <p>10³⁰ --- Ulsted, T.H.: Climate change and potential door-knockers: an Arctic horizon scan of vascular plant species</p> <p>10⁴⁵ --- Greiser, C.: The spruce bark beetle as a climate engineer</p> <p>11⁰⁰ --- Baltazar-Soares, M.: Genomic basis of melanin-associated phenotypes suggests colour-specific environmental adaptations in tawny owls</p> <p>11¹⁵ --- Kvarnemo, C.: Adaptive sperm in an invasive fish – evolution in real time</p> <p>11³⁰ --- Karell, P.: Transgenerational effects of ageing on offspring life histories</p> <p>11⁴⁵ --- Moerman, T.: Parasite transmission in Svalbard reindeer in a changing climate: experimental study on dispersal of a reindeer parasite</p>	
	S13 Plant biology - open session	Palaestra B
	<p><i>Chair: Ciara Dwyer</i></p> <p>10⁰⁰ --- Blomqvist, E.: Biomass and nutrient dynamics in garden lupine (<i>Lupinus polyphyllus</i>): optimal mowing dates for population control</p> <p>10¹⁵ --- Heilmann, E.: Common reed associated microbiome in bioremediation</p> <p>10³⁰ --- Kirchhoff, L.: Seasonality patterns in arctic plants and their root microbiome</p> <p>10⁴⁵ --- Geange, S.: Intraspecific trait variation in dwarf shrubs across coastal, alpine and arctic heathlands</p> <p>11⁰⁰ --- Ryde, I.: Toxic environment? Comparison of the allelopathic capacity of <i>Empetrum nigrum</i> in Icelandic and other Scandinavian soils</p> <p>11¹⁵ --- Nieuwkerk, M.: The impact of local adaptation versus phenotypic plasticity on the pollen chemistry signal of <i>Pinus sylvestris</i> pollen</p> <p>11³⁰ --- von Numers, M.: Determining the climatic niche of vascular plants in the archipelago of SW Finland</p> <p>11⁴⁵ --- Lange, C.B.A.: Precision of molecular plant identification in Thy National Park and applicability in biodiversity monitoring</p>	
	S14 Open session 2	Kerstinsalen, AF-Borgen
	<p><i>Chair: Åsa Lankinen</i></p> <p>10⁰⁰ --- Nicholson, C.: Pesticide use negatively affects bumble bees across European landscapes</p> <p>10¹⁵ --- Olin, A.: Spatial connectivity increases ecosystem resilience towards an ongoing regime shift</p> <p>10³⁰ --- Gårdmark, A.: Fish trait and population changes under multi-generational heating in the wild: adaptations to global warming?</p>	

	<p>10⁴⁵ --- Mattila, A.: Can evolutionary potential help plants survive climate change? Finding patterns in evolvability of <i>Hypericum</i> populations</p> <p>11⁰⁰ --- Sandercock, B.: Apparent survival of white-tailed eagles exposed to wind power in coastal Norway</p> <p>11¹⁵ --- Valtonen, A.: Long-distance movements of edible bush-cricket <i>Ruspolia differens</i> revealed by hydrogen stable isotopes</p> <p>11³⁰ --- Spitzer, R.: Macro-nutritional balancing in northern cervids</p> <p>11⁴⁵ --- Bell, O.: How does radionuclide bioaccumulation in fish vary depending on their size-dependent diet?</p>	
12:00	Lunch Exhibitor presentation: an introduction to bioacoustics for ecological research (Wildlife Acoustics)	AF-Borgen
13:00	BECC Plenary -- Lynn Dicks: How does 'sustainable agriculture' really influence biodiversity? (and how to find out)	Stora Salen, AF-borgen
13:45	Break	
14:00	S15 BECC session: Biodiversity contributions to ecosystem function and services	Stora Salen, AF-borgen
	<p><i>Chair: Yann Clough</i></p> <p>14⁰⁰ --- Wrethling, F.: The impact of heterogeneity and tree diversity on predation pressure of insect herbivores in semi-natural boreal forests</p> <p>14¹⁵ --- Stangl, Z.R.: Diversity benefits commercially significant conifers in Sweden: a single species perspective on mixed species forestry</p> <p>14³⁰ --- Gunko, R.: Is it facts or perceptions that matter? A case study on the role of different types of environments for wellbeing</p> <p>14⁴⁵ --- Robroek, B.: More is not always better: peat moss mixtures slightly enhance peatland stability</p> <p>15⁰⁰ --- Schrofner-Brunner, B.: The importance of beta-diversity for ecosystem stability in heterogeneous landscapes</p> <p>15¹⁵ --- Rodriguez, C.: Understanding the interplay: nature-based solutions, biodiversity conservation, and climate mitigation</p> <p>15³⁰ --- Spong, J.: Valuing unexplored biodiversity and its relationship with nutrient cycling across changing upland environments</p>	
	S16 Thermal ecology	Palaestra A
	<p><i>Chair: Johan Nilsson</i></p> <p>14⁰⁰ --- Huss, M.: Causes and consequences of simultaneous shifts in consumer size and species composition caused by climate warming</p>	

	<p>14¹⁵ --- Shokri, M.: Responses of metabolic rate and foraging behavior to temperature</p> <p>14³⁰ --- Persson, E.: Physiological consequences of growing up at extreme temperatures</p> <p>14⁴⁵ --- Cotgrove, L.: Exploring thermal physiology and aerobic scope in salmon juveniles amidst heatwaves</p> <p>15⁰⁰ --- Thoral, E.: How does environmental temperature during growth affect metabolism of birds in adulthood?</p> <p>15¹⁵ --- Östman, Ö.: Constitutive responses in body growth of pike to increased water temperature</p> <p>15³⁰ --- Tabh, J.: Shrinking, but not shape shifting, is explained by thermoregulatory costs at extremes in birds</p>	
	S17 Urban ecology	Palaestra B
	<p><i>Chair: Caroline Isaksson</i></p> <p>14⁰⁰ --- Persson, A.S.: Key pollinator groups show contrasting trait-mediated responses to urbanisation and agricultural intensification</p> <p>14¹⁵ --- Breitschopf, E.: Reconciling ecosystem functioning and public aesthetic preferences: insights from a north-Norwegian flowerbed experiment</p> <p>14³⁰ --- Woudstra, Y.: Plant adaptations to city life: lessons learnt from dandelions</p> <p>14⁴⁵ --- Liao, W.: Urbanisation drives intraspecific variation in flight-related traits of aquatic insects at different landscape scales</p> <p>15⁰⁰ --- Buffam, I.: Long-term changes in Nordic green roof ecosystems: Implications for ecosystem services</p> <p>15¹⁵ --- Kjellberg Jensen, J.: Oxidative damage in urban bumblebees</p> <p>15³⁰ --- Aguiar-Trigueros, C.: Urbanization alters fungal functional diversity: Larger-spored and pathogenic taxa thrive in cities</p>	
	S18 Mechanistic models for a complex world: advances and insights	Kerstinsalen, AF-Borgen
	<p><i>Chair: Nikos Alexandridis</i></p> <p>14⁰⁰ --- Saltini, M.: Complex life cycles and ecological contexts drive community assembly through evolutionary diversification</p> <p>14¹⁵ --- Li Richter, X-Y.: Combine modeling and experiments to study cyclic dominance games between <i>Escherichia coli</i> strains</p> <p>14³⁰ --- Rüffler, C.: Central place foragers, resource depletion halo's and how the ideal free distribution promotes consumer coexistence</p> <p>14⁴⁵ --- Forsberg, M.: Comparing ecosystems with and without mycorrhizae</p> <p>15⁰⁰ --- Vico, G.: Can we leverage niche complementarity to adapt crop production to climate change? A modelling analysis of intercropping</p> <p>15¹⁵ --- Goldstein, E.: Assessing theoretical economic models using artificial landcover generators and spatially explicit</p>	

	ecological models 15 ³⁰ --- Manzoni, S.: Optimal control models for microbial resource acquisition strategies	
15:45	Afternoon fika	AF-Borgen
16:00	General assembly	Stora Salen, AF-borgen
16:30	Poster session 2	AF-Borgen
All day	Posters available	AF-Borgen
19:00-	Conference dinner	Stora Salen, AF-borgen
Friday 15th March 2024 – Day 3		
Time	Activity	Locality
09:00	Information & closing	Stora Salen, AF-borgen
09:15	Plenary DDLS -- Kelly Swarts: Climate adaptation in natural forest trees	Stora Salen, AF-borgen
10:00	Morning fika	AF-Borgen
10:30	S19 DDLS: the importance of data driven science in ecology and evolution	Palaestra A
	<i>Chair: Tobias Andermann</i> 10 ³⁰ --- Andermann, T.: Spatial biodiversity modeling with remote sensing and AI 10 ⁴⁵ --- Monsimet, J.: Integrating UAV, deep learning, sound, and field data to assess the impact of ant mounds on the treeline ecotone 11 ⁰⁰ --- Brydegaard, M.: An insect species multimeter for troubleshooting landscape ecology 11 ¹⁵ --- Oskolkov, N.: aMeta: a computational method for data-driven ancient metagenomic analysis 11 ³⁰ --- Arancibia, P.: High-throughput experimental community ecology: combining robotics with machine learning 11 ⁴⁵ --- Mammides, C.: The use of novel acoustic technologies to study and monitor bird communities in biodiverse areas	
	S20 Computer vision in ecology and evolution	Kerstinsalen, AF-Borgen
	<i>Chair: Magali Frauendorf & Martin Marzidovšek</i> 10 ³⁰ --- Hentati Sundberg, J.: Sensors and AI in seabird research and monitoring	

	<p>10⁴⁵ --- Høye, T.T.: Globally standardised species monitoring with insect camera traps and deep learning models</p> <p>11⁰⁰ --- Frauendorf, M.: Using computer vision for a quick estimation of ungulate reproduction from camera trap images</p> <p>11¹⁵ --- Marzidovsek, M.: Analyzing the phytoplankton community structure with computer vision</p> <p>11³⁰ --- Svenning, A.: Using citizen science data for training taxonomically informed deep classifiers</p> <p>11⁴⁵ --- Mariager Behrend, A.: Expansion of mountain birch woodlands from aerial photo observations (1954-2022): rates, patterns, and potential drivers</p>	
	Discussion -- Open, fair and representative practices in publishing	Stora Salen, AF-borgen
	<i>Chair: Johan Nilsson</i>	
12:00	Break (no lunch)	
13:00	Excursions	
13:30	Scientist Rebellion workshop	Ecology Building, Heden