



Netherlands Ecological Research Network



Annual Meeting

*12 & 13 February 2008
Congrescentrum De Werelt
Lunteren*



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Tuesday 12 February

TIME	LOCATION		
	Main Entrance Hall		
08:30	Registration and coffee in the Lounge and setting up posters		
	Europa Hall		
10:15	Word of Welcome (Louise Vet, Chair NERN, Director Netherlands Institute for Ecology)		
10:30	Plenary 1: Biodiversity and the Niche <ul style="list-style-type: none"> · Steve Hubbell (Department of Ecology and Evolutionary Biology University of California, Los Angeles, USA) · Jef Huisman (Aquatic Microbiology, Institute for Biodiversity and Ecosystem Dynamics, University of Amsterdam) 		
12:00	Lunch in the restaurant		
	Europa Hall	America Hall	Hall 3+4
13:30	Parallel 1a: Biodiversity Theory: <i>Highlight:</i> This session will thoroughly examine why it is useful to further develop the neutral theory of biodiversity, along with other theories of community structure. <i>Conveners:</i> <ul style="list-style-type: none"> · Rampal Etienne (University of Groningen) · David Alonso (University of Groningen) 	Parallel 1b: Multitrophic interactions: to eat or be eaten? <i>Highlight:</i> This session discusses the molecular and chemical mechanisms underlying multitrophic interactions, and how these processes contribute to the evolutionary dynamics of natural communities. <i>Conveners:</i> <ul style="list-style-type: none"> · Nicole van Dam (Netherlands Institute for 	Parallel 1c: Microbial Ecology <i>Highlight:</i> This session will feature presentations on the ecology of some of Earth's smallest organisms and will be a tribute to their great functional diversity and indispensable ecosystem services <i>Conveners:</i> <ul style="list-style-type: none"> · Johan Leveau (Netherlands Institute for

		Ecology) · Josef Stuefer (Radboud University)	Ecology) · Hauke Smidt (Wageningen University)
13:30	Species abundances and symmetry in community ecology David Alonso, University of Groningen	Effects of multiple biotic stressors on plant performance Tamara van Mólken, Radboud University Nijmegen	Role of biosurfactants in the ecology of pathogenic and beneficial bacteria Irene de Bruijn, Wageningen University
13:50	Yes, We're All Individuals. Are differences really important in community assembly? James Rosindell, Leeds University, UK	Manipulation of maize defense responses by generalist and specialist herbivores Elvira de Lange, Utrecht University	Soil-born microorganisms and abiotic soil factors affect plant defence above- and belowground: pyrrolizidine alkaloid concentration and composition in <i>Jacobaea vulgaris</i> Lotte Joosten, Leiden University
	Neutral community models for microbial diversity Bart Haegeman, INRIA, France	What fuels secondary production in a nutrient poor intertidal ecosystem, the Banc d'Arguin, Mauritania? Matthijs van der Geest, Royal Netherlands Institute for Sea Research	Rising atmospheric CO ₂ and the impact of N/C stoichiometry on microcystin production in harmful cyanobacteria Dedmer van de Waal, University of Amsterdam
break			
14:40	Neutrality, Ecology and Tree-Diversity in the Guianas Olaf Banki, Utrecht University	Chemical information exchange in soil; Tritrophic interactions between conifer roots, vine weevil larvae and entomopathogenic nematodes Marieke Prins, University of Amsterdam	Inter-specific interactions between soil bacteria: war or peace? Paolina Garbeva, Netherlands Institute for Ecology
15:00	An empirical assessment of neutral theory in lowland Amazonian tree communities of Peru Kyle Dexter, Duke University, USA	Plant-mediated interactions between rhizobacteria, herbivorous insects and parasitoids Si-Jun Zheng, Wageningen University	Bringing light into the tunnel - functionality of the gut microbiota Hauke Smidt, Wageningen University
15:20	Grassland species escape exclusion through seasonal niche differentiation Ilse Geijzendorffer, Wageningen University	Soil microbial diversity affects above-belowground interactions Gera Hol, Netherlands Institute for Ecology	The ecology of bacterial individuality Johan Leveau, Netherlands Institute for Ecology

15:40	Time to stretch the legs and have a cup of tea in the Lounge		
	Europa Hall	Hall 3+4	America Hall
16:00	<p>Parallel 2a: Biodiversity Experiments</p> <p><i>Highlight:</i> One of the central themes in ecology is to understand the relationships between biodiversity and the functioning of ecosystems. In this session we will present results of empirical studies designed to disentangle causes and consequences of changes in plant, soil and aboveground diversity</p> <p><i>Conveners:</i></p> <ul style="list-style-type: none"> · Jasper van Ruijven (Wageningen University) · Martijn Bezemer (Netherlands Institute for Ecology / Wageningen University) 	<p>Parallel 2b: Evolutionary Ecology</p> <p><i>Highlight:</i> In this session, recent research will be presented that explores the evolution of adaptive traits and strategies of organisms in response to their physical and living environment, including interactions with members of their own and other species</p> <p><i>Conveners:</i></p> <ul style="list-style-type: none"> · Koen Verhoeven (Netherlands Institute for Ecology) · Jetske de Boer (University of Groningen) · Duur Aanen (Wageningen University) 	<p>Parallel 2c: Spatial Ecology</p> <p><i>Highlight:</i> This session highlights the role of space in influencing ecological interactions, and how this affects species distribution, ecosystem structure and functioning</p> <p><i>Conveners:</i></p> <ul style="list-style-type: none"> · Johan van de Koppel (Netherlands Institute for Ecology) · Max Rietkerk (Utrecht University)
16:00	<p>Biodiversity experiments, where do we stand?</p> <p>Jasper van Ruijven, Wageningen University</p>	<p>Differences between invasive- and native plants of Tansy ragwort (<i>Jacobea vulgaris</i>) related to herbivore defence and growth.</p> <p>Leonie Doorduyn, Leiden University</p>	<p>Vegetation patchiness as indicator of imminent desertification in Mediterranean arid ecosystems</p> <p>Sonia Kéfi, Utrecht University</p>
16:20	<p>Using plant traits to explain species diversity patterns in a long-term field experiment</p> <p>Marleen Pierik, Wageningen University</p>	<p>Using biological traits to unravel the causal mechanisms that link species to their habitat.</p> <p>Wilco Verberk, Radboud University Nijmegen</p>	<p>Fire as a spatial process affects the stability in Savannas</p> <p>Thomas Groen, ITC</p>
16:40	<p>Roots at work: Interspecific root interactions determining community processes</p> <p>Liesje Mommer, Wageningen University</p>	<p>Ant <i>Lasius flavus</i> farming aphids: a new model system for stable mutualisms?</p> <p>Aniek Ivens, University of Groningen</p>	<p>Spatial structure created by organism-environment interactions in salt-marsh pioneer zones</p> <p>Bregje van Wesenbeeck, Netherlands Institute for Ecology /Delft Hydraulics</p>
	break		
17:10	Beyond productivity: Linking plant diversity to	A game theoretical approach to optimal leaf	'Bridge the gap': How seed dispersal across

	the composition of above- and belowground food webs Martijn Bezemer, Wageningen University	area in an existing 5 year old multigenotypic competition experiment. Peter Vermeulen, Utrecht University	heterogeneous landscapes can connect spatially distributed populations. Merel Soons, Utrecht University
17:30	Symbiotic diversity as a driver of plant diversity and plant productivity in dune grassland Susanne de Bruin, VU University Amsterdam	Interspecific sex ratio adjustment of <i>Nasonia</i> in the field. Bernd Grillenberger, University of Groningen	Spatial variability in the net energy intake rate of Bewick's swans in the Lauwersmeer - A remote sensing and GIS perspective Abel Gyimesi, Netherlands Institute for Ecology
17:50	Long-term effects of nutrients in grasslands: do plant and soil communities respond in parallel Annemieke van der Wal, RIVM	Sex allocation in relation to offspring density and sex ratio: An experiment in the great tit. Stephanie Michler, University of Groningen	Spatial ecology of macrobenthic fauna in the Wadden Sea at a landscape scale: impact on molluscivore shorebirds Casper Kraan, NIOZ
18:10	Drinks in the Lounge and at 18:45 dinner in the restaurant		
20:00	Poster sessions / Coffee		
	Europa Hall		
21:00	Evening Programme Guest Speaker: Drilling the Arctic Swamp... climate lessons from the past. Henk Brinkhuis, Utrecht University		

Wednesday 13 February

07:30	Breakfast in the restaurant
08:00	Registration for those coming on Day 2 only
	Europa Hall
08:30	Plenary 2: Multitrophic interactions and ecosystem stability · Joan Ehrenfeld (Rutgers University, New Brunswick, USA)

· Wim van der Putten (Netherlands Institute for Ecology)

Multitrophic interactions and ecosystem stability

A major and timely issue in ecology is to understand what determines the abundance of species, the diversity and changes therein. Human activities are a major driver of changes in abundance and diversity through worldwide influences on land use, atmospheric composition, climate warming, water and soil quality and the spread of species, enhancing the incidence of biological invasions. Understanding effects of human-induced global changes requires understanding of multitrophic trophic interactions between species, their resources (bottom-up control) and their enemies (top-down control). The traditional debate whether species are controlled by bottom-up or top-down factors has shown that these factors can influence each other and that causes and effects can take place in adjacent subsystems or even in distant ecosystems. Therefore, understanding ecosystem stability requires a multidisciplinary approach across spatial and temporal scales.

10:00 Coffee in the lounge

Europa Hall

Hall 3+4

Africa Hall

10:30 Parallel 3a: Behavioural Ecology

Highlight: Behavioural ecology is closely integrated with many other fields of evolution and ecology. This session contains a variety of topics currently investigated. Recurrent themes are the role of behaviour in interactions between individuals and species, and the dissection of ecological interactions

Conveners:

· Tom van Dooren (University of Leiden)

Parallel 3b: Ecophysiology: from genes to organisms

Highlight: Organisms employ a tremendous variety of mechanisms to adjust and adapt to their environment. An important challenge is to understand how phenotypic plasticity and plant adaptation are brought about or constrained by molecular and physiological regulatory mechanisms

Conveners:

Parallel 3c: Plant–Animal Interactions

Highlight: We investigate the response of plants and animals to each other and how these direct and indirect interactions shape their communities with consequences for biodiversity and ecosystem functioning

Conveners:

· Liesbeth Bakker (Netherlands Institute of Ecology)

· Patrick Jansen (Wageningen University)

	· Kees van Oers (Netherlands Institute of Ecology)	· Ronald Pierik (Utrecht University) · Lourens Poorter (Wageningen University)	
10:30	Consistent individual differences in avian personality Kees van Oers, Netherlands Institute of Ecology	"Priming" Arabidopsis for defence: molecular and ecological aspects Marieke van Hulten, Utrecht University	A metabolomic study of thrips resistance in <i>Senecio</i> hybrids Kirsten Leiss, Leiden University
10:50	The evolution of handedness in scale-eating cichlids Tom Van Dooren, University of Leiden	The flexibility of phytoplankton ecophysiology in response to changes in carbon and nitrogen Jolanda Verspagen, University of Amsterdam	Secondary chemical defenses in <i>Brassica oleracea</i> feedback on biodiversity of herbivorous insects Erik Poelman, Wageningen University
11:10	A hitch-hikers guide to parasitism: hitch-hiking behaviour of parasitic wasps on butterflies Ties Huigens, Wageningen University	Exploring roots - selective root placement in response to nutrients Eric Visser, Radboud University Nijmegen	Effects of grazing and vegetation on soil communities Ciska Veen, RU Groningen
11:30	Break		
11:40	Sperm selection in the blue tit <i>Cyanistes caeruleus</i> Elske Schut, University of Groningen	Struggling for light: regulation of plant responses to neighbours Ronald Pierik, Utrecht University	Hunting impacts on seed dispersal and predation Patrick Jansen, Wageningen University
12:00	Who fledges first? Reinder Radersma, University of Groningen	Cytokinin import rate regulates photosynthetic acclimation to canopy density	Grazing impact on aquatic plants depends on nutrient availability?

		Alex Boonman, University of Amsterdam	Liesbeth Bakker, Netherlands Institute of Ecology
12:20	Sex-specific effects of altered competition on nestling growth and survival Marion Nicolaus, University of Groningen	The importance of functional traits for the coexistence of tropical tree species Lourens Poorter, Wageningen University	Are all herbivores nitrogen limited? Endotherms shifting the quest from nitrogen to carbon. Marcel Klaassen, Netherlands Institute of Ecology
12:40	Lunch in the restaurant		
14:00	Poster Session Day 2 / Coffee		
	Europa Hall	Africa Hall	Hall 3+4
15:00	<p>Parallel 4a: Ecogenomics: populations and communities</p> <p><i>Highlight:</i> This session will highlight recent progress in research on ecological and evolutionary genomics of organisms aiming to understand adaptation, species interactions, and population dynamics underlying biodiversity</p> <p><i>Conveners:</i></p> <ul style="list-style-type: none"> · Jacintha Ellers (VU University Amsterdam) · Joop Ouburg (Radboud University Nijmegen) 	<p>Parallel 4b: Species interactions in the aquatic environment</p> <p><i>Highlight:</i> In this session we explore trophic and competitive interactions across a range of time scales and levels of ecological organisation. We consider the behaviour of individuals, communities and coevolutionary processes</p> <p><i>Convener:</i></p> <ul style="list-style-type: none"> · Matthijs Vos (Netherlands Institute for Ecology) 	<p>Parallel 4c: Bio-geochemistry</p> <p><i>Highlight:</i> Biogeochemistry of terrestrial and aquatic ecosystems: current developments in C and nutrient cycling</p> <p><i>Conveners:</i></p> <ul style="list-style-type: none"> · Eric Boschker (NIOO) · Jan-Willem van Groenigen (Wageningen University) · Peter van Bodegom (VU University Amsterdam)
15:00	Eco-genomics of inbreeding depression in	Interference competition and patch choice in	Chemoautotrophy in coastal sediments:

	<i>Scabiosa columbaria</i> L.	foraging shore crabs	processes, rates and communities
	Francesco Angeloni, Radboud University Nijmegen	Isabel Smallegange, Max Planck Institute, Germany	Eric Boschker, Netherlands Institute of Ecology
15:20	An array of responses to insect feeding in Brassica	Interference, predation and priority effects in aquatic communities	Fate of microbial carbon and nitrogen in intertidal sediments
	Colette Broekgaarden, Wageningen University	Daan Gerla, Netherlands Institute of Ecology	Bart Veuger, Netherlands Institute of Ecology
15:40	Molecular characterization of bacterial populations in natural disease-suppressive soils	Interspecific competition in shallow lakes; how a bottom dweller beats the canopy	The $\delta^{18}O$ signature of N_2O : what can it tell us about biochemical production pathways?
	Marco Kruijt, Wageningen University	Bert Hidding, Netherlands Institute of Ecology	Jan Willem van Groenigen, Wageningen University
16:00	Break		
16:10	The role of transcriptional regulation in micro-evolutionary processes; the case study heavy metal tolerance in <i>Orchesella cincta</i> L. (Collembola)	Long-term species interactions and chaos in a plankton community	Reduced N leaching in soil with higher fungal/bacterial ratio.
	Dick Roelofs, VU University Amsterdam	Elisa Benincà, University of Amsterdam	Franciska de Vries, Wageningen University
16:30	The genetic architecture of life-history variation.	Coevolutionary dynamics of host-parasite interactions in natural <i>Daphnia</i> populations	Changes in soil decomposer community composition explain the response of organic matter decomposition to peat meadow restoration measures.

	Basten Snoek, Wageningen University	Ellen Decaestecker, KU Leuven, Belgium	Jerry van Dijk, Leiden University
16:50	Does Xylaria play a specific role in the fungus-growing termite mutualism? Anna Visser, Wageningen University	Weak and strong interactions in aquatic food webs Matthijs Vos, Netherlands Institute of Ecology	Linking plant traits to litter decomposition: modelling potentially global implications for nutrient cycling. Peter van Bodegom, VU University Amsterdam
17:10	Closure - End / Farewell Drinks (Lounge, Mail Hall) - <i>dinner is possible, please ask at Reception</i>		