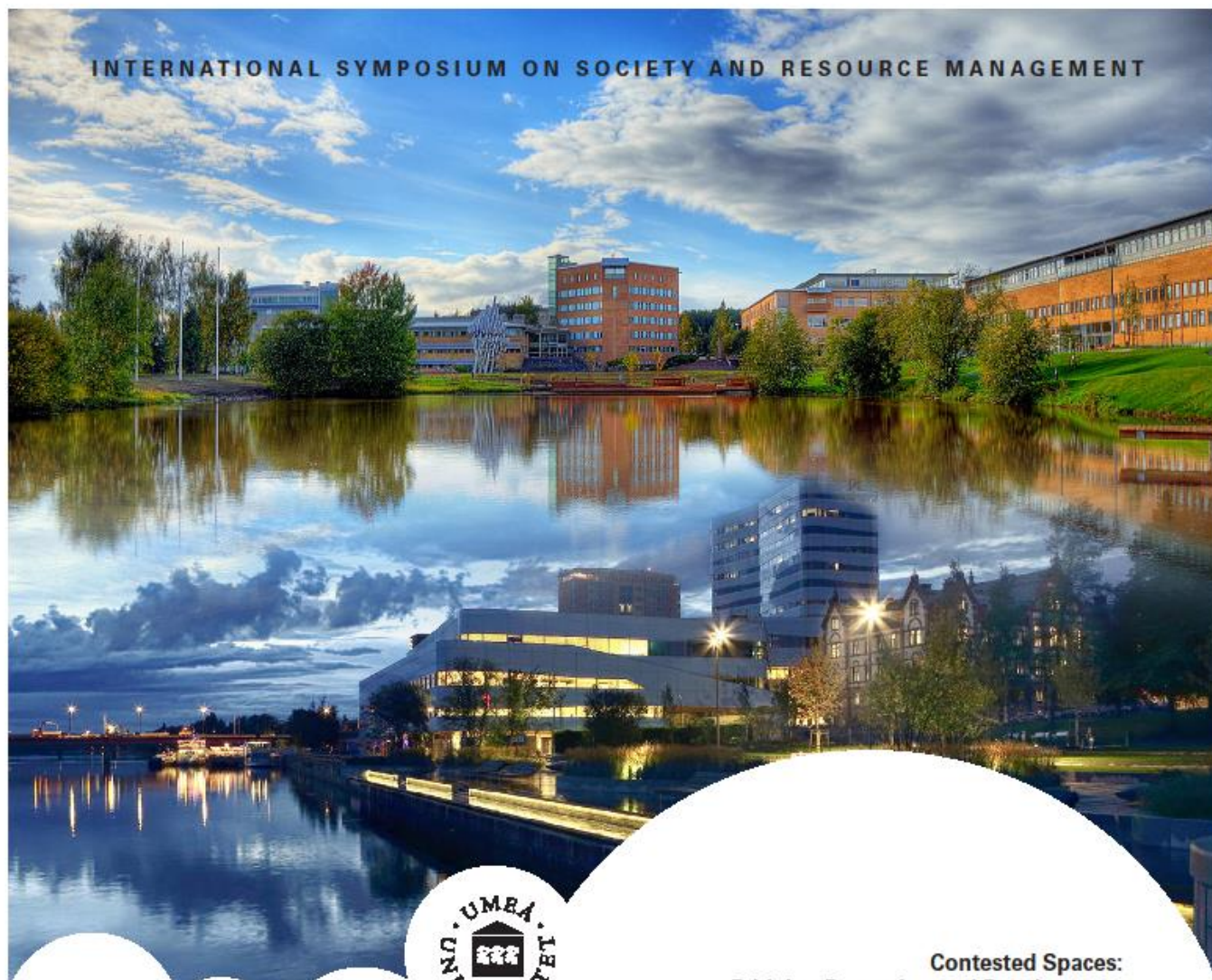


INTERNATIONAL SYMPOSIUM ON SOCIETY AND RESOURCE MANAGEMENT



Contested Spaces:
Bridging Protection and Development
in a Globalizing World



ISSRM

JUNE 19-22, 2017 - UMEÅ, SWEDEN

www.iasnr.org/issrm2017



Welcome from the IASNR Executive Director

It is my great pleasure to welcome everyone to the 2017 ISSRM. As you can see from this program, our local organizers (Camilla Sandström, Carina Keskitalo, Linda Lundmark, and company) have put together an exciting and diverse program.

For those who may be newcomers to our meeting, I want to point out that by virtue of your registration, you are now a member of the International Association for Society and Natural Resources (IASNR). The International Association for Society and Natural Resources (IASNR) was founded in 2001 to provide a professional association to support the integration of social and natural sciences to develop research and application strategies pertaining to environmental and natural resource issues. IASNR is run by an elected executive director, officers, and council. It was preceded by its ISSRM conference, started in 1986 at Oregon State University in Corvallis, Oregon, USA and its journal, *Society and Natural Resources*, first published by Taylor and Francis in 1988.

It is my great hope that you remain as a member and become involved with us. If you are interested in learning more about the Association, I invite you to visit our website (www.iasnr.org) and also to attend the "New Member" meeting on Monday, June 19 from 17:00-18:00 at Chambre Separe (in Restaurang Hjortron at Universum). IASNR's Executive Director, Officers, Council Members, and Society and Natural Resources Editors will be there to introduce themselves, talk about the association, take your questions, and get the chance to meet you. This informal meeting will help you to learn more about the Association and its resources and how you can get involved.

You can also connect with IASNR by attending the IASNR Business Lunch that is included in your registration. This takes place Monday, June 19 from 12:00-13:30 at Universum, no need to RSVP, all are invited. IASNR has several student chapters as well. If you are interested in starting one at your university, connect with Shawn Olson-Hazboun (outgoing Student Representative) or Mysha Clarke (incoming Student Representative). IASNR student representatives, student chapters, and students at the ISSRM host university run many activities every year, including the ISSRM Student Forum and Quiz Bowl.

I also want to let you know that all of us in IASNR are on a first name basis—from our founders and senior folks to first year students. So I encourage you to stick out your hand and say hello to anyone you run into at our meeting (especially me) and strike up a conversation.

For veteran IASNR members, I welcome you back once again and look forward to visiting with you personally at some point during the week. I also ask that you make an effort to greet new members, especially students, and make them feel welcome.

Let me close by wishing everyone a great meeting and safe travels.



Matthew (Matt) S. Carroll

IASNR International Association for Society and Natural Resources Executive Director
(outgoing)

Welcome from the Local Organizing Team!

The theme of our conference is Contested Spaces: Bridging Protection and Development in a Globalizing World. It problematizes the relationship between protection and development that is central to society and resource management nexus. It also aims to place local development and protection debates in the context of globalization and urbanization, which will have a fundamental impact on society and resource management.

Session proposals and abstracts have been submitted with a range of ISSRM-related fields, including 1) The Role of Globalization and Urbanization in Local Development and Protection Debates 2) Living and Working in Several Places: The Development of New Rural-Urban Relations 3) Place Attachment, Environmental Attitudes and Values 4) Sustainable Use of Forest Land, Parks and Protected Areas: Crowding and Carrying Capacity 5) Conflict Management, Policy, Planning and Public Involvement 6) Tourism and Regional Development.

We who have been the co-chairs of the local organizing team represent three major projects with one of Sweden's largest environmental research funders FORMAS, to whom we are grateful for their funding and involvement with this conference. We are also grateful for funding from Vetenskapsrådet, the Gösta Skoglund International Fund and Umeå University. Further, we are grateful to our Local Arrangements Committee - which links together expertise from the two universities at the symposium site, Umeå University and the Swedish University of Agricultural Science - and our Scientific Committee, both of which have also been very much involved in reviewing the abstracts for the conference!

Our Scientific Committee was made up by Anke Fischer, Shawn J. Riley, Tara Teel, Jarkko Saarinen, Marie Stenseke, Maria Johansson, Frode Flemsaeter, Kjell Overvåg, Katarina Rönningen, Jan-Åge Riseth, Michael Hall, Gijsbert Hoogendoorn, Lisa Tyrväinen, Reynald H. Lemelin, Ryan Plummer, Jason Shogren, Kathleen E. Halvorsen, Tom Measham, Richelle Winkler, Zaho Ma, Susan Baker, Christina Allard, Jacinta Ruru, Richard Stedman, Pere Riera and last but not least Eirin Hongslo who sadly passed away earlier this year.

Our Local Arrangements Committee was made up by Dieter K. Müller, Göran Ericsson, Jon Moen, Patrik Lantto, Peter Sköld, Örjan Pettersson, Camilla Widmark, Gun Lidestav, Lars Westin, Runar Brännlund, Katarina Eckerberg and Åsa Össbo.

Many thanks to all for your help!

And for all those of you attending the conference, we wish you the best of times in Umeå and hope you will have a rewarding conference!

With best regards from the local organizers:

Camilla Sandström, Professor of Political Science, Department of Political Science, Umeå University, leader of the FORMAS-funded project *Governing sustainable rural development*

E. Carina H. Keskitalo, Professor of Political Science, Department of Geography and Economic History, Umeå University, leader of the FORMAS-funded *PLURAL* strong research environment (www.slu.se/PLURAL)

Linda Lundmark, Associate Professor, Department of Geography and Economic History, Umeå University, leader of the FORMAS-funded project *Mobilising the rural*

General Conference Programme with Special Events

SUNDAY, JUNE 18

Student Forum, 08:30-14:00 at N300. The Student Forum is an opportunity for students to come together prior to the conference, build professional skills, get to know one another, and discuss some common themes they experience as students. The forum is broken up into a few sessions such as publishing with editors of *Society & Natural Resources*, academic career panel with a grant funding and fellowships writing workshop, an international non-academic career panel, and a CV workshop. Coffee and a wrap is served at 12.00. Following the Student Forum, please join us for a tour of Umeå University. We will take a tour around campus, walk to the art campus, and then to the Boat for the Student mixer.

Registration, 10:00-18:00 at Universum

Workshop: Participatory Governance from a “Pracademic” Perspective, 13:00-15:00 at Universitetsklubben (Universum). *Organized by: Steven Daniels (Utah State University), Gregg Walker (Oregon State University), and Jens Emborg (University of Copenhagen).*

Council Meeting, 14:00-18:00 at Chambre Separe (Restaurant Hjortron at Universum)

University Tour for Students (organized by students at UmU for ISSRM student participants), 15:00-16:00

Student Mixer, 16:00-18:00 at Båten (a boat at the harbour in downtown Umeå). All students are invited to the Student Mixer, whether you attend the Student Forum or not. Drinks and snacks are provided by Taylor & Francis.

Welcome Reception, 18:00-20:00 at Universum. This informal gathering opens the ISSRM with a chance to catch up with friends and get in the conference spirit. Pizza slices offered!

MONDAY, JUNE 19

Registration, 08:00-17:00 at Universum

Welcome to the 2017 ISSRM, 10:00-10:30 at Universum

Welcome and introduction to the conference, themes and logistics from the three local chairs, and a welcome to Umeå University by deputy vice chancellor Dieter Müller.

Keynote 1: Neil Adger, *A social ecology of demographic change and natural resource dilemmas*, 10:30-12:00 at Universum



Neil Adger is Professor of Human Geography at the University of Exeter, UK. He has contributed diverse perspectives to the ecological economics, political ecology and resilience science of local and global environmental change over the past two decades. Neil has promoted social science in global scientific assessments such as the Intergovernmental Panel on Climate Change and the Millennium Ecosystem Assessment.

Awards and IASNR Business Meeting, 12:00-13:30 at Universum. All are invited to this luncheon (included in registration fee). The Rabel J. Burdge and Donald R. Field Outstanding Article Award and the Student Paper award will be presented. Get up to date on IASNR business and see previews of the 2018 ISSRM in Snowbird, Utah, USA. A luncheon wrap, drinks and coffee are included.

Concurrent Sessions, 13:30-15:00 at Naturvetarhuset

Coffee Break, 15:00-15:30 at Universum

Concurrent Sessions, 15:30-17:00 at Naturvetarhuset

Scientific Publishing in the 21st Century: Challenges and Opportunities (Meet the Editors/Discussion Panel), 15:30-17:00 in Naturvetarhuset, N430

IASNR New Member Meeting, 17:00-18:00 at Chambre Separe (Restaurant Hjortron at Universum). Are you new to IASNR within the last year? Is this your first ISSRM? Or maybe not, but you don't really understand how ISSRM and IASNR work? The new member session is an informal introduction to the symposium and the society where you'll meet leadership and learn more about the organization. Welcome!

Poster Session/Welcome Reception, 18:00-21:00 at Gammila Museum. Over forty scientific posters will be on display at this relaxed poster session/reception from 18:00-19:30, in the beautiful Gammila Museum. From 19:00 you can also visit old traditional buildings, enjoy local food and get an insight into the Sami culture with Niclas Alm who is bringing some reindeer to the site. In the old bakehouse you will learn how to make our special traditional "tunnbröd" – it tastes delicious! The museum shops will be open during the evening, and in the cafeteria you will be served coffee and cloudberry cake.

TUESDAY, JUNE 20

Registration, 08:00-17:00 at Universum

Concurrent Sessions, 08:30-10:00 at Naturvetarhuset

Coffee Break, 10:00-10:30 at Universum

Keynote 2: Leela Hazzah, Lion Guardians: Conserving Lions & Preserving Cultures, 10:30-12:00 at Aula Nordica.



As the founder and Executive Director of Lion Guardians Leela Hazzah, tells a compelling story about a conservation organization dedicated to finding and enacting long-term solutions for people and lions to coexist across Kenya and Tanzania. Founded on local value systems, community participation and science, it is based on a decade of research and rigorous measures of success. Photo: Philip J. Briggs.

Lunch, including IASNR Mentorship Activity Lunch, 12:00-13:30 at Universum (included in the registration fee).

Concurrent Sessions, 13:30-15:00 at Naturvetarhuset

Pre-Booked In-Conference Field Trips, 15:15-19:00. Please note the additional movie event, for which you can still sign up – some of the city tours may also still have places available!

- **City tour of Umeå by foot and Umeå Art museum (Bildmuseet).**
15:15 Meet the guides outside of Universum. The tour ends in the city center around 17.30.
The group will be guided through Umeå city where we will see buildings of interest such as the City Hall, Umeå City Church, and learn about the history of Umeå. We will also visit Bildmuseet which received a Special Commendation from the European Museum of the Year in 2015, and was one of the top candidates for the Swedish Museum of the Year Award, as well as for the Council of Europe Museum Prize.
- **City tour of Umeå by bus, Petroglyphs, Umedalens Skulpturpark, and Umeå Art museum (Bildmuseet).**
15:15 The bus departs outside of Universum. The tour ends in the city center around 17.30.
The bus will then take you on the following sites: Norrfors where you'll find the northernmost petroglyphs, dating from 3000-2000 BC, Umedalen Skulptur is one of Europe's most prominent sculpture parks in Umeå within the Umedalen area, and Bildmuseet (see above).
- **Moose safari to Älgens Hus.**
15:15 The bus departs outside of Universum. The tour ends in the city center around 19:00.
Travelling by bus to the Bjurholm municipality outside Umeå, this trip provides an opportunity to see moose up close – beware!
- **Excursion to Norrbyskär.**
15:15 The bus departs outside of Universum. The tour ends in the city center around 21:00.
We will visit Norrbyskär, a beautiful island located in the archipelago of Västerbotten, 40 kilometers south of Umeå, with a fascinating history as Europe's largest steam sawmill at the eve of the 20th century, and the model society its founders aimed to erect there.
- **Movie event.**
15:15 Movie starts, followed by a panel discussion (featuring Elsa Reimerson, Niila Inga, Patrik Lantto, Charlotta Svonni and Deborah McGregor). The event will end around 17.30.
For those wishing to stay in Umeå and not go sight-seeing, we show the prize-winning movie *Sameblod* at Aula Nordica (free of charge), please sign up at the registration desk!



Young Professionals Event, 20:00-22:00 at Hanson & Hammar at Bildmuseet. Fairly new to ISSRM, this informal networking and social event is hosted at Hanson & Hammar at Bildmuseet, a leading museum for photography and visual arts. The museum's new seven story building boasts phenomenal views. Snacks and drinks are provided in the museum restaurant. All young professionals – and if you think you might be one, you probably are – are invited! You can still register to attend at the ISSRM Registration desk.

WEDNESDAY, JUNE 21

Registration, 08:00-17:00 at Universum

Concurrent Sessions, 08:30-10:00 at Naturvetarhuset

Coffee Break, 10:00-10:30 at Universum

Keynote 2: Bjørn P. Kaltenborn, *Managing coexistence in the Anthropocene: Is protection versus development an outdated paradigm?* 10:30-12:00 at Aula Nordica.



Bjørn P. Kaltenborn is a geographer and senior research scientist at the Norwegian Institute for Nature Research (NINA). He has studied human-environment interactions, resource conflicts and the human dimensions of natural resources in Europe, North- and Central America, Africa and Southeast Asia and has a particular interest in interdisciplinary approaches to bridge different scientific epistemologies and methods.

Lunch, 12:00-13:30 at Universum (included in registration fee).

SNR Editorial Board Meeting, 12:00-13:30 at Chambre Separe (Restaurant Hjortron at Universum)

Concurrent Sessions, 13:30-15:00 at Naturvetarhuset

Coffee Break, 15:00-15:30 at Universum

Concurrent Sessions, 15:30-17:00 at Naturvetarhuset

Student Quiz Bowl, 17:30-19:30 at Studion (downtown). Come cheer on the student teams competing in a Jeopardy-style live trivia game! A fun event for all, sponsored by Taylor & Francis. Snacks and a drink provided.

Banquet at Äpplet, 20:00-23:00 at Folkets Hus Äpplet, downtown Umeå (included in registration fee). We pre-celebrate the traditional Swedish midsummer a few days early during the Conference Banquet – all welcome to celebrate and sing! Toast master Göran Ericsson will take us through the evening!

THURSDAY, JUNE 22

Registration, 08:00-12:00 at Universum

Concurrent Sessions, 08:30-10:00 at Naturvetarhuset

Coffee Break, 10:00-10:30 at Universum

Concurrent Sessions, 10:30-12:00 at Naturvetarhuset

ISSRM Adjourns for this year! (lunch on your own)

General Information and Information for Session Chairs and Presenters

Location of activities. The primary hub of ISSRM events is the second floor of the Universum house, where registration takes place. Sessions are held in the buildings adjacent, which are possible to reach directly from the Registration. Keynotes will be held either at Universum (first day) or in Aula Nordica, which is adjacent to the Registration area. The poster session is held at Gammlia Museum, which is located out of campus. The final banquet on Wednesday is held downtown at Folkets Hus Äpplet (please see maps further on in the program).

Registration. The registration desk is located at the second floor of the Universum house. This is the place to go to pick up your program, name tag, to purchase event tickets or any other add-ons, and for general information throughout the symposium. The desk is open Sunday from 10:00-18:00; Monday-Wednesday from 8:00-17:00; and Thursday from 8:00-12:00.

Internet access. If possible, please download eduroam on your computer already at home (<https://www.eduroam.org/>). This network will provide you with internet access on most of the universities within Europe, including Umeå University. If your university or institution is not listed for eduroam you can instead be provided a guest access to the WiFi at Umeå University.

Meals. A small reception with snacks and drinks is included on Sunday and Monday, and lunches are included Monday to Wednesday. A final banquet at Äpplet on Wednesday evening is also included with your registration. As the campus area is located only a 20 minutes' walk from downtown Umeå, there are plenty of food options and restaurants for all preferences are available not far away.

Banking. There is an ATM located outside on the ground floor of the building where the registration is held. There are also ATMs available downtown.

Medical emergencies. The regional hospital is located just by the campus area – please check with the registration services for help to access emergency services. The general national emergency number is 112.

Instructions for Session Chairs and Presenters. After registration, please check the program to confirm the time and location of your session. Please bring a copy of your presentation on a USB memory stick to your presentation room 15 minutes prior to the start of the session. For chairs: ***please bring your laptop to the session and make sure that all presentations get uploaded and are ready for presentation.*** There will be volunteers nearby in case you need any assistance. Sessions are 90 minutes in length and include 3–5 presenters. Please plan your presentation with regard to how many papers are in your session. Most presenters will have 10-15 minutes to present and 3-5 minutes for questions, leaving time for general discussion in the end. Please stay on time, and please keep the order of presentations as listed in the program because some people will go to presentations in different sessions in the same time slot.

Instructions for Poster Presenters. *Please hand in your poster at the registration desk* when you register, and our volunteers will set them up for you at Gammlia Museum. Posters have to be handed in at the latest by afternoon coffee break on Monday. Please remove your poster at the end of the Poster Session on Monday evening.

Concurrent Sessions and Poster Session Presentations

This year's program includes nearly 60 organized paper and panel sessions, outlined below per session, organizer, room and constitutive papers. All concurrent paper and panel sessions are held at Naturvetarhuset and the Poster session Monday evening is held at Gammlia Museum. Please note that only the presenter is listed below – please see the web programme for the full listing of co-authors.

Monday - 13:30-15:00 Concurrent Sessions

The New Forest Owner: Living And Working At Several Places - Part I N260

E. Carina H. Keskitalo (Umeå University)

- Is there a new European forest owner? The institutional context - *E. Carina H. Keskitalo, Umeå University*
- Individual forest owners in context - *Kerstin Westin, Umeå University*
- Interactions between forest owners and their forests - *Torgny Lind, Swedish University of Agriculture Sciences*
- Is there an end to the concentration of businesses and people? - *Urban Lindgren, Umeå University*

Bridging Risk And Resilience In The Repeat Disaster Landscape - Part I N300

Ruth Beilin (University of Melbourne), Karen Reid (University of Melbourne)

- Community resilience: communities and steps towards resilience seen through the eyes of agencies and residents - *E.R. (Lisa) Langer, Scion (New Zealand Forest Research Institute)*
- Resilience in the face of wildfire: Research findings from Mishkeegogamang First Nation, Canada - *Tara McGee, University of Alberta*
- Historical forest fires and floods footprint in the Mediterranean landscapes - *Cristina Montiel Molina, Complutense University of Madrid*

Enhancing Private Land Stewardship - Part I N320

Kate Sherren (Dalhousie University), Michael Sorice (Virginia Tech)

- Is conditionality a necessity or impediment for co-production of environmental and social benefits? Preliminary evidence from a Bolivian PES program - *Zhao Ma, Purdue University*
- Biophysical and social conditions enabling payment for ecosystem service programs that provide drinking water to the world's largest cities. - *Chelsie Romulo, George Mason University*
- Voluntary contributions to biodiversity, forest certification, and shared responsibility for environmental protection in Swedish family forestry - *Brian Danley, Swedish University of Agricultural Sciences*
- The role of landowner associations in biodiversity conservation: fostering management coordination on private lands - *Zach Hurst, Texas A&M University*
- Stewardship effects of incentivized best management practices for conserving a species at risk: Wood turtles in Nova Scotia, Canada - *Kate Sherren, Dalhousie University*

Evaluating Interventions To Facilitate Human – Wildlife Coexistence - Part I N330

Maria Johansson (Lund University)

- What works? Reviewing the effectiveness of interventions to reduce livestock predation by large carnivores - *Ann Eklund, Swedish University of Agricultural Sciences*
- Co-existence of reindeer herding and brown bears in Northern Sweden - *Ole-Gunnar Støen, NMBU*
- Reducing the heat of human-jaguar conflict: Working with communities in Bolivia - *Nuno Miguel Negrões Soares, University of Maine*

The Challenges And Conflicts Of Poaching - Part I

N350

Olve Krange (Norwegian Institute for Nature Research), Erica von Essen (Swedish University of Agricultural Sciences), Hans Peter Hansen (Swedish University of Agricultural Sciences), Ketil Skogen (Norwegian Institute for Nature Research)

- Cry wolf. Aspects on the use of modern surveillance techniques in Policing illegal hunting of Wolves. - *Paul Larsson, Norwegian Police University College*
- Addressing environmental conflict: Uncovering the complex drivers of commercial rhino poaching - *Nicia Giva, UEM, Mozambique*
- When illegal hunting turns into an animal welfare offence - *Outi Ratamäki, University of Eastern Finland*
- Norwegian hunters' views on legal and illegal hunting of wolves - *Ketil Skogen, Norwegian Institute for Nature Research*
- Acceptance of illegal wolf hunting in Norway - *Olve Krange, Norwegian institute for Nature Research*

Indigenous Peoples And Participatory Forest Management: Lessons From The Boreal Forest - Part I

N360

Sara Teitelbaum (Université de Montréal), Ryan Bullock (University of Winnipeg), Per Sandström (Swedish University of Agricultural Science)

- The economics of land use management - an example of the Swedish indigenous people's land use - *Camilla Widmark, Swedish University of Agricultural Sciences*
- Disparities in Boreal Governance and Research Involving Indigenous People - *Ryan Bullock, University of Winnipeg*
- Sustainable development of non-timber forest products in northeastern Ontario: a case study of the Missanabie Cree First Nation - *Nicholas Palaschuk, The University of Winnipeg*

The Contribution Of Experiential Qualities Of Places To Green Infrastructure Planning

N380

Christopher Raymond (Swedish University of Agricultural Sciences)

- Identifying environment-experience relations in natural areas by mapping visitor experiences - *Miisa Pietilä, University of Oulu*
- Fostering the human dimension in planning riverine nature based solutions: social data assessment using Public Participation GIS - *Sarah Gottwald, Leibniz University Hannover*
- The perception of landscape values as indicators of landscapes stewardship behaviours across Europe - *Maria Garcia-Martin, University of Freiburg*
- Revealing experiential qualities of places by Instagram images in green infrastructure - *Anton Stahl Olafsson, University of Copenhagen*

The Role Of Citizens In Environmental Governance

N410

Anke Fischer (James Hutton Institute), Arjen Buijs (Wageningen University)

- Exploring a representation psychological lens to understand environmental governance: values, images of human nature and folk social science - *Anke Fischer, James Hutton Institute*
- Self-governance in natural resource management: opportunities and governance challenges across Europe - *Arjen Buijs, Wageningen University*
- Enhancing motivations for biodiversity through contextual values and principles - *Stijn Neuteleers, UCL - University of Louvain*
- Engaging riverine stakeholders in evaluating major landscape changes: Results from public perception research - *Wessel Ganzevoort, Radboud University*
- Citizen engagement with trees, woods and forests: environmental governance in urban and rural areas of the UK - *Bianca Ambrose-Oji, Forest Research*

Urban Greening I

N420

William Stewart (University of Illinois), Paul Gobster (USDA Forest Service)

- Urban lawns: how “green” and sustainable are they? Results from Swedish interdisciplinary project - *Maria Ignatieva, SLU, Uppsala*

- From the ground up: how a scalar understanding of soil lead can inform urban gardening. - *Kirsten Schwarz, Northern Kentucky University*
- Agroecology for the Shrinking City - *Dustin L. Herrmann, Northern Kentucky University*
- The Effect of Edible City Strategy on Reduction of Carbon Emission: An Example of Taichung City, Taiwan - *Chang-Chan Huang, Tunghai University*

Understanding Outdoor Recreation Patterns And Practices Using Public Participation GIS (ppgis) N430

Lee Cervený (University of Washington), Kelly Biedenweg (Oregon State University), Jenna Tilt (Oregon State University)

- Using a participatory GIS approach to exploring outdoor recreation patterns along the urban-to-rural continuum in Seattle, Washington (USA) - *Lee Cervený, University of Washington*
- Deconstructing recreation as a landscape value in public participation GIS - *Kelly Biedenweg, Oregon State University*
- What is the benefit of river revitalization for outdoor recreation in urbanized settings? A survey study in a Swiss region using PPGIS - *Matthias Buchecker, Swiss Federal Research Institute WSL*

Wellbeing: Exploring The Concept Across Scales, Places, And Linkages (Panel Session) N440

Courtney Flint (Utah State University)

- Panel participants: *Amanda Bentley Brymer, Miami University; Courtney Flint, Utah State University; Jennifer Givens, Utah State University; Jacki Schirmer, University of Canberra and Yuki Yoshida, University of Tokyo*

New Approaches To Environmental Governance N450

- Flexibility among reindeer herders to carnivore governance: A case study in Nordland, Northern Norway - *Camilla Risvoll, Nordland Research Institute*
- Sam River Twice: the Politics of Dam Removal in the Pacific Northwest - *Peter Brewitt, Wofford College*
- Role of local conservation groups in wetland governance: 1997-2016 - *Peiying Lee, National Taiwan University*

Perceptions Of Forest-related Bioenergy In The Americas N460

K.E. Halvorsen (Michigan Technological University), M.D. Rouleau (Michigan Technological University), J. Dunn (Michigan Technological University), E. Pischke (Michigan Technological University)

- Agent-based Modeling and Forest-related Bioenergy Development in Michigan, USA - *Mark Rouleau, Michigan Technological University*
- NIPF Landowners' Perceptions of Woody Bioenergy in Northern Wisconsin and Michigan, USA - *Jennifer L. Dunn, Michigan Technological University*
- Cross-national Comparison of Forest-related Bioenergy Project Perceptions - *Kathleen E. Halvorsen, Michigan Technological University*
- Environmental Values and Biodiversity Impacts of Oil Palm Plantations in Tabasco, Mexico - *Erin Pischke, Michigan Technological University*

Monday – 15:30-17:00 Concurrent Sessions

The New Forest Owner: Living And Working At Several Places - Part II

N260

E. Carina H. Keskitalo (Umeå University)

- Rural-urban politics: changing conceptions of the human-environment relationship - *Örjan Pettersson, Umeå University*
- Multilevel planning and conflicting interests in the forest landscape - *Olof Stjernström, Umeå University*
- Forests in common and their contribution to local development - *Gun Lidestav, Swedish University of Agricultural Sciences*

Bridging Risk And Resilience In The Repeat Disaster Landscape - Part II

N300

Ruth Beilin (University of Melbourne), Karen Reid (University of Melbourne)

- Public influences on prescribed fire in longleaf pine ecosystems - *Jason Gordon, Mississippi State University*
- Social Memory, Social Learning and Narratives of Responsibility in the Repeat Disaster Landscape - *Karen Reid, University of Melbourne*
- Fire Smart Territory, an innovative social-ecological approach for enhancing wildfire resilience in the European Union: the main challenges for implementing it - *Fantina Tedim, University of Porto*

Enhancing Private Land Stewardship - Part II

N320

Kate Sherren (Dalhousie University), Michael Sorice (Virginia Tech)

- Voluntary measures to engage forest owners in nature conservation – a qualitative systematic review - *Matilda Miljand, Umeå University*
- How biodiversity monitoring can aid in farmer stewardship? - *Stefano Targetti, Czech University of Life Sciences Prague*
- A moral approach to farmer adoption of conservation practices - *Amit Pradhananga, University of Minnesota*
- Voluntary Stewardship and the Canadian Species at Risk Act: Exploring landowners' willingness to protect Species at Risk in Prince Edward Island - *H Carolyn Peach Brown, University of Prince Edward Island*

Evaluating Interventions To Facilitate Human – Wildlife Coexistence - Part II

N330

Maria Johansson (Lund University)

- Can Experiential Education Have Long Term Effects on Attitudes and Risk Perceptions toward Coyotes? - *Carly Sponarski, University of Maine*
- Evaluating interventions to reduce human fear of brown bears and wolves - *Maria Johansson, Lund University*
- Predicting recreational boaters' compliance with right whale regulations using the theory of planned behavior - *Nancy Montes, University of Florida*
- Discussant - *Steve Redpath, University of Aberdeen*

The Challenges And Conflicts Of Poaching - Part II

N350

Olve Krange (Norwegian Institute for Nature Research), Erica von Essen (Swedish University of Agricultural Sciences), Hans Peter Hansen (Swedish University of Agricultural Sciences), Ketil Skogen

- Poaching rate and risk in legally harvested Finnish wolf population - *Johanna Suutarinen, University of Oulu*
- Poaching might help wolf conservation – the socio-ecological paradox of Norwegian wolf policy - *Bjørn Petter Kaltenborn, Norwegian Institute for Nature Research*
- Discourses on Illegal Hunting in Sweden: The Rhetoric of Silence - *Erica von Essen, Swedish University of Agricultural Sciences*

- Outlaws or protected? DNA and canine biopolitics in a Finnish poaching case - *Taru Peltola, Finnish Environment Institute*
- Wolves and political alienation - *Max Eriksson, Umeå University / SLU*

Indigenous Peoples And Participatory Forest Management: Lessons From The Boreal Forest - Part II

N360

Sara Teitelbaum (Université de Montréal), Ryan Bullock (University of Winnipeg), Per Sandström (Swedish University of Agricultural Science)

- Participative processes as a negotiating space: Indigenous engagement and collaboration in forest management in Québec - *Stephen Wyatt, Université de Moncton*
- Comparing Indigenous forestry co-governance models in Canada: Lessons from Haida Gwaii and Eeyou Istchee - *Sara Teitelbaum, University of Montreal*
- Exploring the role of digital data entry in participatory environmental monitoring - *Jeremy Brammer, McGill University*

Perceptions Of Place

N410

- How and Why Do Agricultural Irrigators Perceive Abundance or Scarcity of Water Resources in Michigan? - *Brockton Feltman, Michigan State University*
- Conservation, underuse and wealth in a socio-ecological production landscape: A capitals approach to resource management on Sado Island, Japan - *Yuki Yoshida, The University of Tokyo*
- Urbanization, Migration and complex social Life in Chennai City of Tamil Nadu, India - *Magamuni Thamilarasam, University of Madras*
- Transformation and regeneration of small towns in coimbatore districts, India: 2001 -2011 - *Mathivanan Sakthivel, University of Madras*
- A Journey from Lost to Found? Constructing Community Perceptions Oriented Evaluation of Cultural Ecosystem Service Toward Community Natural Resource Management - *Chih-Liang Chao, Tsing Hua University*

Urban Greening II

N420

William Stewart (University of Illinois), Paul Gobster (USDA Forest Service)

- Neighborhood residents' responses to green infrastructure innovations on Detroit vacant properties - *Kelsea Dombrowski, University of Michigan*
- Effects of vacant lot ownership on improving neighborhood social life - *William Stewart, University of Illinois Urbana-Champaign*
- Participatory design for children's playground in urban parks - *Su-Hsin Lee, National Taiwan Normal University*
- Social-cultural factors in urban greening: A case study in Taiwan - *Jing-Shoung Hou, National Formosa University, Taiwan*
- Climate resilience in urban areas across the European Union: Reflections on the EKLIPSE nature-based solutions expert working group process and outcomes - *Christopher M. Raymond, Swedish University of Agricultural Sciences*

Scientific Publishing In The 21st Century: Challenges And Opportunities (Meet The Editors / Discussion Panel)

N430

Peter Leigh Taylor (Colorado State University), David A. Sonnenfeld (SUNY Environmental Science and Forestry)

- Panel participants: *Jonas Levêque, Associate Editor, Journal of Park and Recreation Administration (Sagamore); Carmen Maganda, co-Editor in Chief, Regions and Cohesion (Berghahn Journals); Ulrike Pröbstl-Haider, Editor, Journal of Outdoor Recreation and Tourism (Elsevier); Stewart Lockie, Editor, Environmental Sociology (Routledge) and David A. Sonnenfeld, co-Editor in Chief, Society & Natural Resources (Taylor & Francis)*

Governance For Ecosystem Health And Poverty Alleviation: Analytical Approaches And Lessons

N440

Fiona Nunan (University of Birmingham)

- Governance for Ecosystem Services and Poverty Alleviation: synthesizing approaches and lessons learned - *Fiona Nunan, University of Birmingham*
- Uniting forest and livelihood outcomes? Analyzing external actor interventions in sustainable livelihoods in a community forest management context - *Clare Barnes, LSE*
- Global discourses of bioeconomy: A new era of green economy or rhetoric? - *Irmeli Mustalahti, University of Finland*

Complexities In Social-ecological-systems

N460

- Organizational Learning In Natural Resource Management Agencies: Work Units And Stakeholder Networks - *Katrina Dickson, University of New England & Invasive Animals Co-operative Research Centre*
- Managing wildlife in a diverse social-ecological setting: Mapping complexity in Swedish moose management - *Sabrina Dressel, Swedish University of Agricultural Sciences*
- Conservation and Novel Futures: Managing Biodiversity in Multifunctional Landscapes in the Age of the Anthropocene - *Sarah Clement, University of Liverpool*
- Spacing conservation practice: The role of pluralism, positionality and place-making in adaptive landscape governance - *Daniel Williams, US Forest Service, Rocky Mountain Research Station*
- Public lands litigation and its influence on social-ecological systems: a case of social system processes in southwestern Idaho, USA - *Amanda Bentley Brymer, Miami University*

Monday – 18.00-19.30 Poster Session (Gammlia Museum)

“New Ruralities” and Conflict Management

- The Impact of Taiwan’s Social Change on Rural Landscape Evolution. - *Man-Yu Wang, National Taiwan University*
- Regional land-use conflicts from the perspective of stakeholders -- two case studies from Germany. - *Rosemarie Siebert, ZALF*

Conservation and Biodiversity

- Developing standardized protocols for evaluating habitat improvement projects: A collaborative partnership in the U.S. - *Chelsey Walden-Schreiner, North Carolina State University*
- Successful Rulemaking under the U.S. Endangered Species Act (ESA). - *Krista Lyons, Boise State University*
- Social-ecological resilience in the Brazilian semiarid region: what the tropical dry forest has to say? - *Amanda Silvino, University of Campinas*
- Management effective evaluation and planning of a protected area-A case study of Yangmingshan National Park in Taiwan. - *Tsai-Shiuan Lin, National Taiwan University*

Environmental Attitudes and Values

- Managing ecosystem commons -- Attitude toward environmental consideration among Swedish forest owners based on a forest owner typology. - *Camilla Widmark, Swedish University of Agricultural Sciences*
- Where did the trees go?: An investigation of the public’s perceptions and support for actively managed early successional habitats. - *Sarah Naiman, Cornell University*
- Impacts of outdoor environmental education on students with emotional and behavioral disabilities. - *Rachel Szczytko, North Carolina State University*

- The influence of Element's Identifiability on Landscape Preference. - *Yu-Ting Lo, National Taiwan University*
- "Lake Superior Will Always Be Lake Superior": Resident perceptions of climate change and community adaptation on the North Shore of Lake Superior in Minnesota, USA. - *Jenn Shepard, University of Minnesota*
- The needs of elementary School's Teachers for Environmental Education nearby Chukou Nature Center. - *Ming-Yuan Huang, National Chiayi University*
- The Multi-Administration Model of Community Green Space: A study on the Value of Urban Nursery Garden. - *Chung Heng Hsieh, Fu Jen Catholic University*
- Wildlife Value Orientations Shape The Way Ecological Information Influences Preferences For Urban Wetlands. - *Tanja Straka, The University of Melbourne*
- Steady Progress or Stagnation? An Application of the Narrative Policy Framework to Michigan's Net Metering Legislation - *Emily Prehoda, Michigan Technological University*
- Seeing eucalyptus plantations through the eyes of rural communities: fast-wood forestry and water resources in Paraíba Valley region, Brazil - *Clarissa de Araújo Barreto, University of São Paulo*

Human Dimensions of Wildlife

- Seek, find and log: Analysis of the behaviour of geocachers. - *Helene Marous, University of Natural Resources and Life Sciences*
- Stakeholder views on interventions to protect domestic animals from large carnivore attacks. - *Ann Eklund, Swedish University of Agricultural Sciences*
- Sustainable Salmon Angling Tourism in a Changing World (SALMONCHANGE). - *Stian Stensland, Norwegian University of Life Sciences*
- Exploring the preconditions and opportunities for improved human-lion coexistence in Ngorongoro, Tanzania. - *Ingela Jansson, Swedish University of Agricultural Sciences*

Indigenous Peoples and Natural Resources

- Protected Areas: Laboratories of Settler-Indigenous Reconciliation. - *Chance Finegan, York University*
- Social learning outcomes and implications for collaborative forest planning with First Nations: Lessons from the Atikamekw Nehirowisiwok's experience within Quebec's forest regime (Canada). - *Stephen Wyatt, Université de Moncton*

Parks and Protected Areas: Crowding and Carrying Capacity

- Research About the Indicator System of Ecosystem-Service-based Ecological Carrying Capacity: Case of Changhua Coastal Wetland in Taiwan. - *Tsai Su-Mei, Tunghai University, Taiwan*
- The challenges and opportunities of public open spaces in Kuwait's urban and suburban neighborhoods. - *Lamis Behbehani, Kuwait University*

Policy and Planning, Public Involvement and Place Attachment and Meaning

- Using quality of life as a boundary concept in local evaluation of built green structures. - *Maria Johansson, Lund University, Sweden*
- Evaluating Climate Change Planning for Longleaf Pine Ecosystems and Wildlife Conservation in the Southeast United States. - *Kalysha Clark, NC State University*
- Patterns of collaborative governance over natural resources in the Swedish mountain region. - *Katarina Eckerberg, Umeå University*
- Access to Land in Europe: How to secure agricultural land for sustainable farming when landowners are losing the place attachment? - *Adéla Stanislavová, Czech University of Life Sciences*

Population/Demographics and Resource Economics/Valuation

- Tracking Human Footprint across the Continent: geospatial analytics for measuring and visualizing per capita land and resource consumption in the conterminous United States. - *Ross Meentemeyer, North Carolina State University*
- Inclusive Wealth of Sado Island: Roadmap to a Society in Harmony with Natur. - *Yuki Yoshida, The University of Tokyo*

Resource Extraction and Protection

- Public Risk Perceptions of Metallic Mineral Mining in Maine: A Mixed Methods Study. - *Andrew Morgan, University of Maine*
- Paradigm Analysis of Taiwanese Wetland Conservation Act. - *Yu Yeh-Liang, National Taiwan University*

Tourism and Outdoor Recreation

- Do green practice affect final prices of bed and breakfasts in Taiwan: A hedonic pricing approach. - *Yi-Yu Huang, Tunghai University*
- Using camera traps for visitor monitoring – A study at Grönten Mountain in Bavaria. - *Gerd Lupp, Technical University of Munich*
- Businesses create place attachment through marketing in Camden and Mount Desert Island, Maine, USA. - *Ashley Cooper, University of Maine*
- Long-term Monitoring of State Park Operations in the U.S.: The Annual Information Exchange (AIX) Survey Project. - *Yu-Fai Leung, North Carolina State University*
- Applying the Pile Sort Method to the Context of Climate Change. - *Lydia Horne, University of Maine*
- Distribution and overlap of right whales and recreational vessels in the southeastern united states. - *Nancy Montes, University of Florida*
- Permitting Compliance Among Long-distance Hikers in Baxter State Park, Maine. - *Leah Beck, University of Maine*
- The effect of the self-construal on voice behavior -- the case in hospitality. - *Molly CJ Huang, Aletheia University*
- Park Usage Demands of Migrant Workers -- A Case Study of Philippine Workers in Urban Park. - *Min Hsi, National Taiwan University*
- S-score: An Alternative Approach to Interpret Likert-type Data in Recreation Research. - *Chen-Wei Cheng, The Pennsylvania State University*

Tuesday - 08:30-10:00 Concurrent Sessions

Planning For Rural-urban Dynamics: Living And Acting At Several Places (the PLURAL Project) - Part I

N260

Urban Lindgren (Umeå University), Torgny Lind (Swedish University of Agricultural Sciences)

- A forest owner corps in transition. Characteristics and geographies of non-industrial private forest owners in Sweden 1990–2010 - *Svante Karlsson, Umeå University*
- The attitudinal base of forest owners view on forest management: A question of personal beliefs and forest values. - *Annika Nordlund, Umeå University*
- A toolbox for Co-production of Knowledge and Improved Land Use Dialogues – The Perspective of Reindeer Husbandry - *Per Sandström, SLU, Umeå*
- Accounting for a Diverse Forest Ownership Structure in Projections of Forest Sustainability Indicators - *Tomas Lämås, Swedish University of Agricultural Sciences*

Community Vulnerability And Adaptation To Natural Resource-related Shocks, Stressors, And Growth N300

Jessica Ulrich-Schad (South Dakota State University), Hua Qin (University of Missouri-Columbia), David Matarrita-Cascante (Texas A&M University)

- Perceived Community Adaptation to Oil Booms and Busts in the Bakken Region - *Jessica Ulrich-Schad, South Dakota State University*
- A happy disaster? Wildfire, unintended consequences and human interpretations - *Rolf Lidskog, Örebro University*
- Green Energy and The Contentious Politics of Vulnerability and Risk - *Shaun Golding, Kenyon College*
- Smallholder cocoa farmers responses to environmental shocks in Papua New Guinea - *Gina Koczberski, Curtin University, Australia*
- Human adaptation to climate change in Bohdanska Dolyna, Ukrainian Carpathians - *Garry Sotnik, Portland State University*

Lifestyle Migration, Amenity Migration And Natural Resources - Part I N320

Marco Eimermann (Umeå University), Linda Lundmark (Umeå University)

- Narratives of the Good Life: Seeking the Idyllic Lifestyle in Today's China - *Peng Wang, The Hong Kong Polytechnic University*
- Lifestyle Migrants and Entrepreneurs in the Chilean Northern Patagonia: Competition, Dialogues and Resources - *Ieva Zebryte, UFRO and ISM Vilnius*
- Understand land issues in climate change adaptation decisions for migrant settlers in Wewak, East Sepik Province, Papua New Guinea - *Georgina Numbasa, University of Papua New Guinea*

Marine And Fishing Management N330

- Commercial Fishermen's Perceptions of the Northern California Coast Marine Protected Area Network Planning Process: A Mixed-Methods Research - *Félicia Olmeta-Schult, Washington State University*
- Examining co-management and social resilience in Maine's sea urchin fishery - *Kimberly Ovitiz, University of Maine*
- An Evolutionary Take on Individual Fishing Quotas Across International Fisheries - *Kate Haapala, Purdue University*
- Coal Energy Development in Rampal and Grassroots Resistance: Understanding Environmental Justice Politics - *Manoj Misra, Hankuk University of Foreign Studies*

A Future Without Wilderness? N380

Robyn Bartel (University of New England), Fiona Utley (University of New England)

- Wilderness, coexistence and coevolution: placing humans past and present - *Robyn Bartel, University of New England*
- What is the wild place? Evolving values of wilderness in the northern region of NSW - *Vanessa Bible, University of New England*
- Another walk on the wildside: a phenomenology of rewilding and edgelands - *Fiona Utley, University of New England, Australia*

The Politics Of The Bioeconomy – Discursive Struggles, Trade-offs And Alternative Pathways N410

Sara Holmgren (SLU), Klara Fischer (SLU)

- Towards a Swedish bioeconomy transition? Stakeholders' perceptions in the light of a National Forest Program - *Johanna Johansson, Södertörn University*
- Transitioning to a forest-bioeconomy? Actor networks, beliefs and coalitions along emerging wood value chains in Germany and Scandinavia - *Alex Giurca, University of Freiburg*
- Re-inventing the bicycle: How calculative practices shape urban governance of a socio-technical system - *Matthew Cashmore, Swedish University of Agricultural Sciences*

- GM trees in the bioeconomy transition – discursive struggles in the Swedish forestry sector. - *Klara Fischer, SLU*
- The future of the Estonian energy sector in relation to EU 2050 low carbon economy roadmap - *Sara Holmgren, SLU*

Wild-harvested Meat As a Coupler Of Human And Natural Systems

N420

Göran Ericsson (Swedish University of Agricultural Sciences)

- Sharing without limits – Norwegian wild meat distribution in the cyber-age - *Johan Barstad, The Norwegian University College for Agriculture and Rural Development*
- The meat network as a moralizing factor to the moose hunt - *Bjørn Egil Flø, Norwegian Institute for Bioeconomy*
- Insights into Wild-Harvested Meat Consumption and Sharing - *Amber Goguen, Michigan State University*

Wildlife Management And Conservation

N430

- Comparing Community-based Deer Management Efforts: Implications for Good Governance - *Emily Pomeranz, Cornell University*
- Assessing policy beliefs in Swedish large carnivore policy - *Katarina Hansson, Umeå University*
- Outlining good practice in large carnivore conservation and management - *Tasos Hovardas, CALLISTO - Wildlife and Nature Conservation Society*
- Assessing the willingness for a shared future: Local communities and the reintroduction of the wild forest reindeer (*Rangifer tarandus fennicus*) in Finland. - *Jani Pellikka, Natural Resources Institute Finland*
- The involvement of a grassroots conservation organization in wetland monitoring- A case of Wu-wei-kang Wildlife Refuge in Taiwan - *Dau-Jye Lu, NTU*

The Contested Nature Of Social-ecological Relationships: Towards Bridging Conceptualizations

N440

L. Jamila Haider (Stockholm Resilience Centre), Johan Enqvist (Stockholm Resilience Centre), Vanessa Masterson (Stockholm Resilience Centre), Simon West (Stockholm Resilience Centre), Matteo Giusti (Stockholm Resilience Centre)

- Meaningful nature experiences and nature routines: What connects children to nature and when. - *Matteo Giusti, Stockholm Resilience Centre*
- Ritual and practice as a mechanism of co-evolution: Everyday forms of resilience for development - *L Jamila Haider, Stockholm Resilience Centre*
- Competing place meanings of protection and development: a social-ecological approach to unpack community conservation outcomes on the Wild Coast, South Africa - *Vanessa Masterson, Stockholm Resilience Centre*
- Do bottom-up approaches improve spatial fit between urban lakes and water governance? A social-ecological network of human-nature interactions in Bangalore, India - *Johan Enqvist, Stockholm University*
- Embracing the primacy of experience: how a practice perspective can bring accounts of adaptive management to life - *Simon West, Stockholm Resilience Centre*

Energy

N450

- Current Supply Chain Developing of Industry on Woody Pellets in Taiwan - *Ming-Yuan Huang, National Chiayi University*
- Energy Regions in Austria: A Strategy for Sustainable Development or an unefficient new Infrastructure? - *Boris Salak, University of Natural Resources and Life Sciences, Vienna*
- The complex system of sustainable energy supply in local economy transition – a social network analysis of the wood pellet industry in the northeastern US - *Jessica Leahy, The University of Maine*
- Residential High Electric Energy Usage Patterns - *Paulus Mau, BC Hydro*

Environmental Attitudes And Education Programs I

N460

- Cross-Case Environmental Behavioral Patterns Among Polarized Socio-Economic Occupants of Two LEED-Certified Housing Developments - *Lamis Behbehani, Kuwait University*
- Relationships between children's outdoor activities and environmental attitudes by gender and race: Alone time outside predicts positive environmental attitudes - *Rachel Szczytko, North Carolina State University*
- Effects of Nature Experience on Children's Development: Psychological, Social, and Nature Intelligence Benefits - *Man-Yu Wang, National Taiwan University*
Comparing scientist and research partner satisfaction in transdisciplinary research - *Melissa Haeffner, Utah State University*

Tuesday - 13:30-15:00 Concurrent Sessions

Planning For Rural-urban Dynamics: Living And Acting At Several Places (the PLURAL Project) - Part II

N260

Urban Lindgren (Umeå University), Torgny Lind (Swedish University of Agricultural Sciences)

- Contested Lands? Dissonance and Common Ground in Stakeholder Views on Forest Values - *Katarina Haugen, Umeå University*
- Constructing subjectivity and consuming forestry: governing recourses and relations of Swedish forests - *Elias Andersson, Swedish University of Agricultural Sciences*
- Combining data on forest condition and ownership characteristics – A model for improved understanding of forest owner's behavior - *Erik Wilhelmsson, SLU*

Working Together: What Impacts Can Research Have On Indigenous Communities? N300 (Workshop)

Åsa Össbo (Vaartoe - Centre for Sami Research), Kristina Sehlin MacNeil (Vaartoe - Centre for Sami Research)

- Participants: *Niila Inga, Laevas čearru; Kristina Sehlin MacNeil, Vaartoe - Umeå University; Krister Stoor, Umeå University; Åsa Össbo, Umeå University*

Lifestyle Migration, Amenity Migration And Natural Resources - Part II

N320

Marco Eimermann (Umeå University), Linda Lundmark (Umeå University)

- International lifestyle tourism entrepreneurs in northern Sweden: balancing consumption and production interests around winter tourism - *Doris Carson, Umeå University*
- Climate Change and Lifestyle Sports: ABM Simulations on the Future Mobility of Swedish Ski Community - *O. Cenk Demiroglu, Istanbul Bilgi University*
- International migrant entrepreneurs in rural Swedish places: collaboration and illoyal competition - *Marco Eimermann, Umea University*
- Amenity/Lifestyle Migration to the Chilean Patagonia: Understanding the views of "the other" and their Effects on Integrated Community Development Opportunities - *David Matarrita Cascante, Texas A&M University*

Trail Tourism And Recreation

N350

- Travel motives of German tourists in the Scandinavian mountains: the case of Fulufjället National Park - *Mareike Garms, Ernst Moritz Arndt University Greifswald*
- The Multi-functional Trail: A Literature Review - *Kristin Godtman Kling, Etour, Mid-Sweden University*
- Valuing cultural ecosystem services of German national parks: Applications of the travel cost method to assess the recreational values - *Manuel Woltering, Julius-Maximilians-Universität Würzburg, Germany*

- The impact of deadwood on the recreational and aesthetic experience in forests – an application of the visitor employed photography (VEP) method in the Bavarian Forest National Park, Germany - *Philipp Sacher, Greifswald University*

Contemporary Forest Land Conservation: Crossing Boundaries And Crossing Scales N360

Erin Kelly (Humboldt State University), Yvonne Everett (Humboldt State University)

- Moving past the timber wars: timber management through negotiation - *Erin Kelly, Humboldt State University*
- The Klamath Basin: Toward Fire Resiliency and Co-management of Fire-Adapted Landscapes - *Rodolfo Curiel, Humboldt State University*
- Role of Local Organizations and Multi-scale Initiatives in Conserving and Stewarding Private Forest Landscapes: Comparative cases in New England and Northern California - *Cecilia Danks, University of Vermont*
- Expanding Community Based Organization Capacity for Cross Boundary Forest Stewardship in Northern California: Responses to Cannabis Cultivation - *Yvonne Everett, Humboldt State University*
- "Cannabiz" and Local Governance in Northwest California: Regulatory Innovation for Conservation and Development - *Judith Mayer, Humboldt State University*

Marine Recreation

N380

Berit C. Kaae (University of Copenhagen), Andreas S. Hansen (University of Gothenburg)

- Too soft for the game - overlooking outdoor recreation aspects in coastal-marine national parks - *Knut Bjørn Stokke, University of Gothenburg*
- Measuring and mapping place attachment in coastal and marine recreation for planning support - *Anton S. Olafsson, University of Copenhagen*
- The application of national survey data and mapping of marine recreation to the MSP process – experiences from Denmark - *Berit C. Kaae, University of Copenhagen*

Environmental Justice In The Era Of Sustainability

N410

Bethany Cutts (North Carolina State University), Stacia Ryder (Colorado State University), Sarah Naiman (Cornell University)

- Remediated rivers and urban empowerment – a community voice approach - *Bethany Cutts, North Carolina State University*
- Intersectional Environmental Subjection, Privilege and Justice: A Critical Examination of the Hidden Harms of Natural Resource Boom and Bust Cycles in U.S. History - *Stacia Ryder, Colorado State University*
- Environmental engagement among Latinos: An exploratory study of environmentalists in the greater Chicago region - *Sarah Naiman, Cornell University*
- Stormwater, Green Infrastructure and Environmental Justice in the Southeastern United States - *Louie Rivers III, North Carolina State University*

Human Dimensions Of Large Carnivore Conservation And Management (Panel Session)

N420

Tasos Hovardas (CALLISTO-Wildlife and Nature Conservation Society)

- Panel participants: *Tasos Hovardas, CALLISTO-Wildlife and Nature Conservation Society; Mari Pohja-Mykrä, Rural Institute, University of Helsinki; Göran Ericsson, Swedish University of Agricultural Sciences; Ian Convery, University of Cumbria*

Green Infrastructure Practices And Policies From Around The World

N430

Jenna Tilt (Oregon State University)

- More than just money: Understanding barriers and opportunities for green infrastructure implementation in urban-rural interface communities. - *Jenna Tilt, Oregon State University*
- Continuing Professional Education in Green Infrastructure: A Constructivist Approach to Interdisciplinary Trainings - *Christine Johnson, Oregon State University*

- Questioning the Ethos of Efficiency: Can Flood Irrigation Function as a Green Infrastructure? - *Jamie McEvoy, Montana State University*
- Experiences from teaching urban blue green structures at masters level. A case study from Norway - *Anne-Karine Halvorsen Thorén, Norwegian University of Life Sciences*

Implications Of a Multilevel, Social-ecological Systems Approach For Understanding Values

N440

David Fulton (University of Minnesota), Jeremy Bruskotter (Ohio State University)

- A social-ecological systems conception of values and the dynamic nature of values- *David Fulton, USGS MN Coop Unit*
- Toward a multi-level framework for understanding the role of values and identity in intergroup conflict - *Alia Dietsch, The Ohio State University*
- Implications of a multilevel approach to values for natural resource governance: examining the values gap - *Tara Teel, Colorado State University*

Innovative And Sustainable Landscape Planning

N450

Anna Zachrisson (Umeå University), Sissel Hovik (Oslo and Akershus Universitys), Aase Kristine Aasen Lundberg (Norwegian University of Life Sciences)

- Integrated and decentralized protection and development of mountain landscapes - *Terje Skjeggedal, Norwegian University of Science and Technology*
- Implementing collaborative planning in the Swedish mountains. Methods for citizen involvement with the purpose to achieve environmental policy innovation in municipal comprehensive planning - *Therese Bjärstig, Department of Political Science, Umeå University*
- Green infrastructure and ecosystem services assessments for integrated landscape planning in a boreal to mountain rural context - *Johan Svensson, Swedish University of Agricultural Sciences*
- Cross sector and multi-level collaborative landscape planning: challenges for collaborative management - *Sissel Hovik, Oslo and Akershus University College*
- Regional Wild Reindeer Plans - Legitimate and Efficient Policy Tools for Sustainable Landscapes? - *Aase Kristine Lundberg, Norwegian University of Life Sciences*

Energy, Place And Time: Temporal Dimensions Of Energy Transitions (Panel Session)

N460

Thomas Measham (CSIRO), Richard Stedman (Cornell University)

- Panel participants: *Kate Sherren, Dalhousie University; Richard Stedman, Cornell University; Jeffrey Jacquet, Ohio State University; Thomas Measham, Commonwealth Scientific and Industrial Research Organisation; Neil Adger, University of Exeter*

Wednesday - 08:30-10:00 Concurrent Sessions

Planning For Rural-urban Dynamics: Living And Acting At Several Places (the PLURAL Project) - Part III

N260

Urban Lindgren (Umeå University), Torgny Lind (Swedish University of Agricultural Sciences)

- Absent neighbours and passive shareholders - the issue of residency and involvement in the management of a forest common - *Stefan Sandström, Swedish University of Agricultural Sciences*
- Balancing Different Forest Values: Evaluation of Forest Management Scenarios in a Multi-criteria Decision Analysis Framework - *Karin Öhman, Swedish University of Agricultural Sciences*
- The construction of sense of place among forest owners in Sweden: a qualitative study - *Sabina Bergstén, Umeå University*

Applying The Unifying Negotiation Framework (Panel Session)

N300

Jens Emborg (University of Copenhagen), Steven Daniels (Utah State University), Gregg Walker (Oregon State University)

- Panel participants: *Steve Daniels, Utah State University; Gregg Walker, Oregon State University; Jens Emborg, University of Copenhagen*

Integrating Place And Politics For Natural Resource Management

N320

Charlotta Söderberg (Luleå University of Technology), Karin Beland Lindahl (Luleå University of Technology)

- Sustainable placemaking in an EPI and multi-level governance context - *Charlotta Söderberg, Luleå University of Technology*
- Resisting Mineral Development: The Role of Place Attachment in Social Mobilization and Multi-Level Governance - *Anna Zachrisson, Umeå University*
- Making Sustainable places? Realizing the UK's Low Carbon Transition Plan in Rural South-West England through local third party engagement - *Ria Dunkley, Cardiff University*
- Competing Pathways to Sustainability - Exploring Mining Controversies in the Swedish Mountain Region - *Andreas Johansson, Luleå University of Technology*
- Assessing societal demands to develop multifunctional forest management strategies in the Munich Metropolitan Area (Germany) using the concept of ecosystem services - *Gerd Lupp, Technical University of Munich*

Interdisciplinary Perspectives On China's Air Pollution Crisis

N330

Bryan Tilt (Oregon State University)

- "G20 Blue": Campaign-Style Environmental Policy Enforcement in China - *Yongdong Shen, University of Oslo*
- Fighting Air Pollution with APPs: A Case Study of "Blue Sky Map" and "Environmental Observation" - *Hongtao Li, Zhejiang University*
- Facing the Dangers of Household Air Pollution in rural China - *Mette Halskov Hansen, University of Oslo*
- Public Perceptions of Air Pollution in China: Methodological Challenges - *Bryan Tilt, Oregon State University*

Learning In Natural Resource And Environmental Management: Pursuing Individual And Societal Transformation (Panel Session)

N350

Joanne Moyer (The King's University), John Sinclair (University of Manitoba)

- Panel participants: *Joanne Moyer, The King's University; Alan Diduck, The University of Winnipeg; Ryan Bullock, The University of Winnipeg; Tiago Almudi, University of Manitoba and John Sinclair, University of Manitoba*

Nordic Mountains: Experiences And Challenges For Sustainable And Policy Development

N360

Kjell Overvåg (Norwegian Mountain Research Network/Eastern Norway Research Institute), Tor Arnesen (Eastern Norway Research Institute)

- Defining and characterizing mountain areas and communities in Norway - *Tor Arnesen, Eastern Norway Research Institute*
- Mountain Recreation Trends – Observations from Sweden - *Peter Fredman, Mid-Sweden University*
- Rewilding in Norwegian mountains – conflicts with traditional husbandry grazing: The case of turning the Hjerkin artillery range into a national park. - *Hans Olav Bråtå, Eastern Norway Research Institute*
- Co-management in protected areas in Norway – experiences and challenges - *Tone Magnussen, Nordland Research Institute*

Polycentric Governance, Multi-level Co-ordination And Prospects For Sustainability N380

Tatiana Kluvankova (SPECTRA Institute of Forest Ecology SAS), Susan Baker (Cardiff University)

- Co-Ordination Problems in Polycentric Governance - *Susan Baker, Cardiff University, Wales*
- Governance for Sustainability in Cross-border European Regions: Polycentricity to Cope with Regional Polarization - *Martin Špacek, Comenius University in Bratislava*
- Polycentricity of Forest Commons: Enhancing Social Innovation for Well-Being in Marginalised Regions in Europe? - *Stanislava Brnkalakova, CE SPECTRA, Institute of Forest Ecology, Slovak Academy of Sciences, CETIP Network*
- Different approaches to flood risk management in Sweden: the river groups in Ljungar and Ljusnär - *Gertrud Alirani, Mid Sweden University*
- Devolving Power from the State: Local Initiatives for Nature Protection and Recreation - *Katarina Eckerberg, Umeå University*

Protected Areas And Indigenous Peoples: Conservation Challenges And Solutions N410

(Panel Session)

Chance Finegan (York University)

- Panel participants: *Chance Finegan, York University; Deborah McGregor, York University; Elsa Reimerson, Umeå University; Jacinta Ruru, University of Otago; Carina Green, Uppsala University*

The Public Interest In Private Land: Access, Use, Management, And Tensions Between Private Property And The Public Trust N420

Matthew Hoffman (Norwegian Centre for Rural Research)

- Hunting, Democracy, and Community in Scotland, Norway, and the U.S. - *Matthew Hoffman, Norwegian Centre for Rural Research*
- The challenges of participatory and systemic environmental management: from aspiration to implementation - *Antonia Eastwood, The James Hutton Institute, UK*
- From 'Vision' to Reality; Emerging Public Opinion of Collaborative Management in the Greater Yellowstone Ecosystem - *Kathleen Epstein, Montana State University*

Polar Or Remote Cultural And Resource Management N430

- Environmental Risk Communication in the Arctic: A Study of Communicating about Contaminants with Inuit Populations - *Amanda Boyd, Washington State University*
- Participatory mapping of socio-cultural values in and outside the Varanger National Park in Norway - *Vera Helene Hausner, UiT-the Arctic University of Norway*
- Connecting cultures of knowledge, -enhancing adaptive and flexible management of marine resources in a time of global and environmental change. - *Ann Eileen Lennert, UIT & Greenland Climate Research Centre*
- Tradition, Place and Change: Livestock Farming in the Falkland Islands - *Kate Sherren, Dalhousie University*
- Applying Australian collaborative research to inform the interplay between society and the natural environment in remote areas, with a focus on community value from mining and Indigenous communities - *Rod Reeve, Australian Cooperative Research Centre*

How Fire Is Viewed Around the World N440

- Climate change, wildfire risk and sustainable management of peri-urban landscapes in South Australia - *Douglas Bardsley, The University of Adelaide*
- Cross-scale connections and impacts of fire on ecosystem services in mountain systems. - *Jelena Vukomanovic, North Carolina State University*
- Landscape planning and fire management in local wildfire scenarios. Mediterranean-climate ecosystems case studies (Central Mountain Range, Spain) - *Luis Galiana-Martín, Universidad Autónoma de Madrid*
- Assessing social vulnerability to wildfire using surveys, spatial data and wildfire simulations - *Travis Paveglio, University of Idaho*

Water Governance

N450

- The Influence of Previous Experiences on Actors' Perspectives in Integrated Watershed Management: A Case Study from Switzerland - *Raphael Gaus, Swiss Federal Institute for Forest, Snow and Landscape Research WSL*
- Collective Efficacy Theory as a Framework for Qualitative Data Analysis and Community-Centered Water Resource Management - *Vanessa Perry, University of Minnesota*
- The impact of socio-hydrology research on water management decisions in Utah, USA. - *Kent Dean, Utah State University*
- Integrating Ecosystem Service and Human Wellbeing Frameworks for Qualitative Analysis of Semi-Structured Interviews with Key-Informants in Northern Utah - *Brett Miller, Utah State University*

Environmental Values And Consumption

N460

- A Discursive Analysis of the Environmental Attitudes and Values that Motivate Purchases of 'Specialty' Meat in Utah: Assessing the Marketability of Cattle Raised by More Sustainable Practices - *Kailie Leggett, Utah State University*
- Food Justice and Security in a Community of Color: A Survey of Residents Living in an Urban Food Desert Located within the Southern Appalachian Region of The United States - *Robert Emmet Jones, University of Tennessee*
- Resources as Spatiotemporal Rhythms: Paces of Water in Developing Delhi - *Heather O'Leary, Washington University in St Louis*
- Willingness of Consumers to Purchase Environment-friendly Agricultural Products and to Conserve Leopard Cat - *Shu Hsiang Zhuang, National Chiayi University*

Wednesday - 13:30-15:00 Concurrent Sessions

Forest Owners In Change: Examples From Different Countries

N260

- Heir Property and Timber Management: Overcoming Obstacles to Productive Use of the Land - *Rebecca Barlow, Auburn University*
- Making Informed Decisions: How Self-Efficacy and Social Capital Increase Stewardship of Family Forest Lands - *Ian Anderson, University of Maine*
- Applying the Transtheoretical Model of Change to Landowner Legacy Planning Decisions - *Shorna Allred, Cornell University*

Reflexive Forestry - Forest Management in a Transtemporal Perspective (Panel Session)

N300

Erland Måråld (Umeå University), Camilla Sandström (Umeå University)

- Panel participants: *Erland Måråld, Umeå University; Annika Nordin, Swedish University of Agricultural Sciences; Karin Beland Lindahl, Luleå University of Technology and Camilla Sandström, Umeå University*

The Challenges Of Collaboration In Environmental Governance

N320

Richard Margerum (University of Oregon)

- The Challenges of Collaborative Governance: Towards a New Research Agenda - *Richard Margerum, University of Oregon*
- The Challenges of Collaboration during the Implementation Phase: New Zealand's Experience - *Edward Weber, Oregon State University*
- The Challenges of Collaboration: Findings from maintaining multi-functional floodplains - *Jan Fliervoet, Radboud University*

The Social Values Of Forests – Diverse Perspectives And Implications For Forest Planning

N330

Anna Sténs (Umeå University), Louise Eriksson (Umeå University), Ylva Lundell (Swedish University of Agricultural Sciences), Eva-Maria Nordström (Swedish University of Agricultural Sciences), Jeannette Eggers (Swedish University of Agricultural Sciences)

- Stakeholder views on the social values of forests and the implications for forest governance - *Anna Sténs, Umeå University*
- Not only for recreation – Diversity in forest values and beliefs about tree species in different counties in Sweden - *Louise Eriksson, Umeå University*
- Long-term forest planning for multiple values – combining wood production with forests for human wellbeing - *Eva-Maria Nordström, Swedish University of Agricultural Sciences*
- Balancing landscape-level forest management between recreation and wood production - *Jeannette Eggers, Swedish University of Agricultural Sciences*

Risk Management

N380

- Perceptions of environmental risk and value in the forested peri-urban Locarnese region of Switzerland - *Annette Bardsley, The University of Adelaide*
- Fire use and fire risk in the Irish upland landscapes: Perspectives from farmers and other landholders - *Matt Carroll, Washington State University*
- Inside the Rez Cross: An assessment of preparing for climate hazards in Beardsy's & Okemasis First Nation - *Sandra Betancur, University of Saskatchewan*
- How is fire viewed in the southeastern U.S.? - *John Kush, Auburn University*

Tourism And Wilderness I: Still a Vital Yet Problematic Relationship?

N350

Jarkko Saarinen (University of Oulu), C. Michael Hall (University of Canterbury)

- Commercializing the unpredictable: Perspectives from wildlife watching tourism entrepreneurs in Sweden - *Lusine Margaryan, Mid Sweden University*
- “No one, I think, is in my tree... Misunderstanding all you see” - National park tourism and wilderness in Central Europe - *Marius Mayer, Universität Greifswald*
- Crowding in the desert – The conflicting use of the Sharquiyah Sands desert, Sultanate of Oman - *Manuela Gutberlet, RWTH Aachen University and German University of Technology in Oman*
- Here, there and everywhere. Accessibility issues in coastal and marine national parks. - *Andreas Skriver Hansen, University of Gothenburg*

The Recreation/Tourism, Sustainability And Climate Change Nexus

N420

- Willingness to take action on climate change: A cluster analysis of Maine tourists - *Sandra de Urioste-Stone, University of Maine*
- Risky Business: Climate Change Risk Perceptions of Nature-Based Tourism Stakeholders in Western Maine, U.S. - *Lydia Horne, University of Maine*
- Tourism-induced contributions to the Sustainable Development Goals: insights from Jozani – Chwaka Bay National Park and Biosphere Reserve, Zanzibar/Tanzania - *Hubert Job, Julius-Maximilians-Universität Würzburg, Germany*
- The direct and indirect impacts of climate change on outdoor recreation: Empirical examples from the high deserts of the Intermountain West, USA - *Jordan W. Smith, Utah State University*

Indigenous Peoples And Natural Resources

N430

- Capacity development of local forest users and factors influencing in capacity development for achieving collective action: evidence from Madhupur Sal Forest Bangladesh - *Khondokar Humayun Kabir, University of Hohenheim*
- Humans and One-humped Camels Relationships in Arid Tropical Mangrove Ecosystems - *Hiroshi Nawata, Akita University*
- The Limits and Opportunities of Using GIS as a Boundary Object to Represent Indigenous Knowledge in Resource Planning and Implementation Processes - *Ashley Shaw, University of Saskatchewan*

- Does certifying the sustainability of biofuel production guarantee sustainability? Analysis of a case study from Yucatan, Mexico - *Amarella Eastmond, Universidad Autonoma de Yucatan*
- Immigrant Labor in the U.S. Forest Industry: What Impacts are Felt in Guatemalan Communities Exporting Labor? - *Arnold Brodbeck, Auburn University Extension*

Place Attachment And Meaning I

N360

- "I feel it is mine!" – Psychological ownership in relation to natural resources - *Anne Matilainen, University of Helsinki, Ruralia Institute*
- Nature bonding and empowerment through tourism - *Marianna Strzelecka, Linnaeus University*
- Exploring the Relationship between Activity Involvement and Place Attachment - *Chih-Yi Chen, National Taiwan University*
- The moderation effect of psychological resilience to the effect of place attachment on perceived environmental impact - *Yi-Ju Chen, National Taiwan University*

Pests And Invasive Species I

N450

- The Uncertainty of Attitude Certainty about Non-native Insect Threats - *Walter Kuentzel, University of Vermont*
- The Cost of Attitude Indifference toward Non-Native Insect Threats - *Ariana Cano, UVM*
- The efficacy of social norms as a tool for aquatic invasive species management - *Kenneth Wallen, Texas A&M University*
- Encouraging public cooperation to better manage invasive species - *Adam Zwickle, Michigan State University*

Environmental Attitudes And Education Programs II

N460

- Impact of Environmental Education Programs on Wildlife Population - *Samridhi Shrestha, Grand Canyon University*
- Using multi-method sampling approaches to reduce bias in participative surveys - *Lisa Ernoul, Tour du Valat*
- To Adopt or Not? The Complexities of Predicting Residential Best Management Practices (BMP) Adoption to Combat Non-Point Source Pollution - *Joan Brehm, Illinois State University*

Wednesday - 15:30-17:00 Concurrent Sessions

Mining In The North From a Resource Governance Perspective

N260

Lena Maria Nilsson (Umeå University)

- Mining regions in transition: legacies of resource extraction in post-extraction futures - *Dag Avango, KTH-Royal Institute of Technology*
- Regional development and land-use conflicts in northern Sweden - *Joakim Byström, Umeå University*
- Social and demographic changes associated with the end of mining activity in Malå district of Västerbotten - *Lena Maria Nilsson, Umeå University, Arcum*
- A role for authority supervision in impact assessment? Examples from Finnish EIA Reviews – *Lovisa Solbär, Umeå University*

Fishing Communities And Wetland Governance

N300

- Exploring the power of Agency in fishery: Reflections from fishing communities of Lake Tanganyika, Kigoma, Tanzania - *Gideon Bulengela, University of Dar es Salaam*
- Changing Gear, shifting the role: The paradox of genuine mechanism to escape from poverty of small-scale fisheries in East Java Sea, Indonesia - *Akhmad Fauzi, Bogor Agricultural University, Indonesia*

- What Can We Learn from Local Wetland Governance? - *Anna Haines, University of Wisconsin - Stevens Point*
- Coalitions, learning and negotiation in the formation of new marine protection areas - *Annica Sandström, Luleå tekniska universitet*

Outdoor Recreation

N320

- Opportunities and Challenges for Accessibility to Outdoor Recreation in an Urban Environment: A Case Study of Östersund, Sweden - *Rosemarie Ankre, ETOUR Mid Sweden University*
- Outdoor recreation among ethnic minority adolescents in Denmark - *Sandra Gentin, University of Copenhagen*
- Experimental Long-Term Evaluation of a Campaign to Reduce Freeriding-Wildlife Conflicts - *Marcel Hunziker, Swiss Federal Research Institute WSL*
- Using social-psychological theories to understand and influence environmentally significant behavior - a review of previous research on low-impact recreation behavior and a conceptual discussion - *Tian Guo, The University of Maine*

Tourism And Wilderness II: Still a Vital Yet Problematic Relationship?

N350

Jarkko Saarinen (University of Oulu), C. Michael Hall (University of Canterbury)

- Constructing Wilderness and Wilderness Utilisation: Political Ecologies and the Governance of Finnish Wilderness Areas - *Jarkko Saarinen, University of Oulu*
- Protected areas in local communities - *Inga Marie Skavhaug, University of Tromsø*
- Wilderness protection in Iceland – why, where and for whom? - *Thorvardur Arnason, University of Iceland*
- Icelanders' wilderness perception and experience - *Rannveig Ólafsdóttir, University of Iceland*
- Managing 'Fair' Access (And Protection) In National Parks Through A New Lens Of 'R' - Which No Longer Represents Responsibility! - *Richard Stones, University of Exeter*

Place Attachment And Meaning II

N360

- Exploring the Relationship between Natural Environments and Place Bonding with Prospect-Refuge Theory - *Fang-Sin Chiu, National Taiwan University*
- Exploring the Relationship between Place Bonding, Impact, and Pro-Environmental Behavior - *Ting-Hsuan Wang, National Taiwan University*
- Landscape representations of craftwork through the eyes of craftspeople: a case of the pottery village of Onta, Japan - *Sampei Yamashita, Kyushu Sangyo University*
- Exploring the role of setting attachment in person-place bonding at a local nature center - *Maxwell Olsen, The Pennsylvania State University*

Pests And Invasive Species II

N450

- People and Pests: Understanding how land managers think about wild dog management in Australia and the implications for collective action - *Tanya Howard, Australian Centre for Agriculture and Law*
- Assessing the social acceptability of invasive species control methods among rural landowners - *Neelam Poudyal, The University of Tennessee*
- The social dimensions of biological control of invasive species: Why implementing an ecological solution to Australia's carp invasion is a social challenge - *Jacqueline Schirmer, University of Canberra*
- Factors influencing family forest owners' decisions to engage in invasive plant control - *Mysha Clarke, Purdue University*

Energy Transitions And Climate Change I

N410

- Individual and community level factors affecting intention to adopt rooftop solar panels - *John Parkins, University of Alberta*
- Interventions yield energy-saving behaviour in residences at Rhodes University, South Africa - *Gladman Thondhlana, Rhodes University*
- Political Orientation and Preferences for Energy Technologies in Utah - *Richard Krannich, Utah State University*

- Direct and Indirect Effects of Political Ideology on Support for Unconventional Fossil Fuel Development in the U.S. - *Christopher Clarke, George Mason University*

Collaboration And Decision-making

N420

- Which factors are key for collaborative arrangements to actually fulfil their role at a regional level? - *Irina Mancheva, Umeå University*
- Partnerships' potential for protecting forests' social values - *Ulrika Widman, Umeå University*
- Local land-change decision-making in a global context - *Bianka Douw, VU University*
- Collaborative approaches as a local response to increased market pressures: The case of the Naturpark Jauerling-Wachau - *Angela Meyer, Organisation for International Dialogue and Conflict Management (IDC), Vienna, Austria*

Livelihoods And Poverty

N430

- Understanding the truncated goat rearing model in rural parts of India: Resources, access and livelihood option - *Falak Jalali, RRA Network*
- Resilience offers escape from trapped thinking on poverty alleviation - *Steven Lade, Stockholm University*
- The challenge of malaria management alongside regional water resource delivery in sub-Saharan Africa - *Glenn Wilson, University of Southern Denmark*

Policy Reform

N440

- Voices on the ground: Land and agrarian questions in Cape Town's Philippi Horticultural Area, South Africa - *Frank Matose, University of Cape Town*
- Caffeine Demonstrates Anthropogenic E. coli: Drives Policy Change - *Marian Rice, University of Utah*
- The role of stakeholders in land governance: A case study for the Central Rift Valley of Ethiopia - *Adenew Ariti, VU University Amsterdam*
- Pro-poor land policy development in Uganda: the role of non-governmental actors in the policy formulation process - *Mutakela Kingsley Minyoi, University of Botswana*
- Ocean Management in Canada's Gulf of St. Lawrence: the Politics of Strategic Planning in an Internal Sea - *Peter Clancy, St. Francis Xavier University*

Conservation, Biodiversity, and the Framing of Nature

N380

- Framing and visualization of biodiversity in EU policy - *Ylva Ugglå, HumUS, Örebro University*
- Thinking about nature in the East: an empirical investigation into images of the human-nature relationship in Vietnam - *Ngoc T. B Duong, Radboud University*
- Using Perceived Landscape Benefits to Target Residents for Water Conservation Programs - *Laura Warner, University of Florida*
- Ecosystem services frame in ecological discourse. Analysis of public consultation concerning Plans of Protection Tasks for Natura 2000 - *Krzysztof Maczka, Adam Mickiewicz University*
- Volunteering In the Environmental Sector - A Comparison between Austria and Great Britain - *Ulrike Pröbstl-Haider, University of Natural Resources and Life Sciences, Vienna (BOKU)*

Policy Instruments To Manage Human-Wildlife Conflicts (Workshop)

N460

Camilla Sandström (Umeå University), Inger Hansen (NIBIO, Norsk institutt for bioøkonomi, Norway), Katrina Rønningen (University of Nordland, Bodø)

- Panel participants: *Adam Pekar, Columbia University; Camilla Risvoll, University of Nordland; Bodø, Göran Bostedt, Umeå University; Ian Convery, University of Cumbria; Ingela Jansson, Swedish University of Agricultural Sciences; Inger Hansen, NIBIO, Norsk institutt for bioøkonomi; Katrina Rønningen, Norsk senter for bygdeforskning; Leela Hazzah, Lion Guardians; Marcel Hunziker, Swiss Federal Inst. for Forest, Snow and Landscape; Mari Pohja-Mykrä, Helsinki University; Astrid Mirjam Zabel von Felten, SCNAT, ProClimGeschäftsstelle; Steve Redpath, The University of Aberdeen*

Thursday - 08:30-10:00 Concurrent Sessions

Forest Policy And Forestry

N260

- Organizational Change in the United States Forest Service: Crossing Boundaries and the Role of the Boundary Spanner - *Patricia Orth, Colorado State University*
- Economic Contribution of the USDA Forest Service within the Southeastern United States - *Stephen Grado, Mississippi State University*
- Custom-made stakeholder workshops - Towards more successful integration of scientific knowledge into practice - *Nataly Juerges, Gerog-August-University Göttingen*
- Exploring the Forest Welfare Policy in Korea: Key concepts, Issues, and Demand - Focused on National Survey of Forest Welfare 2015 - *Ga Young Choi, National Institute of Forest Science, Republic of Korea*
- The Swedish Forest Agency: From New Public Management to New Public Service? - Effects and consequences of the Swedish Forest Agency's collaborative methods when formulating environment goals. - *Maja Tejre, Umeå University*

Climate Change Adaptation

N300

- Global Climate Change and Local Adaptation: Working Across Scales of Problems, Governance, and Human Experience - *Jenn Shepard, University of Minnesota*
- Shades of historical significance: A decision analytic process for increasing transparency in cultural heritage climate adaptation planning - *Erin Seekamp, NC State University*
- Predicting visitors' willingness-to-pay for climate change adaptation planning in a nature-based tourism destination - *Allie McCreary, North Carolina State University*
- Assessing Idaho's rural and urban difference in the acceptance of water resources management strategies to mitigate climate change impacts. - *Monica Hubbard, Boise State University*
- An Exploration of Institutional Factors Affecting the Use of Climate Change Science in Forest Management Decisions in Vermont - *Clare Ginger, University of Vermont*

Social Justice In Development

N320

- "Just Right"? A Comparative Analysis of Place Disruption and Risk Perception in Ohio's Utica Shale - *Anne Junod, The Ohio State University*
- Towards a civics model of community engagement in environmental impact assessment - *Alan Diduck, The University of Winnipeg*
- Development and its Effects on Poverty Reduction: The Case of Oil and Gas Production in Texas - *Joachim Singelmann, The University of Texas at San Antonio*
- Agency, Risk, and Environmental Justice: The Story of Landowners and the Shale Gas Industry - *Dylan Bugden, Cornell University*
- Forecasting rural employment effects from unconventional gas in Australia - *Thomas Measham, CSIRO*

Recreation And Technology

N330

- Geocaching and informal trails – a case study from Donau-Auen National Park, Austria - *Claudia Hödl, University of Natural Resources and Life Sciences, Vienna*
- GPS accuracy assessment of smartphones in protected natural areas - *Chelsey Walden-Schreiner, North Carolina State University*
- Mobile app for visitor monitoring and education purposes in recreational management - *Claudio Aguayo, University of Gothenburg*
- To Explore the Perceived Naturalness and Landscape Preference on the Bikeway with Eye-tracking System - *Li-Ya Chen, National Taipei University of Education*

Sharing Understandings Across Worldviews

N350

- Campus Research that Matters: Making a Difference in Campus Sustainability Efforts - *Carla Trentelman, Weber State University*
- Teaching Critical Reflection in Science-Citizen Interaction - *Frans Padt, Penn State University*
- Protecting the Sacred, Taming the Sacred: Views on Manganese Mining in West Timor, Indonesia - *Hannah Ling, Charles Darwin University*

- Research Challenges in Communities Characterized by Water Conflict: Experiences from Two Mexican Cases - *Carmen Maganda, INECOL*

Environmental Concerns To Risk And Uncertainty

N360

- Attitude change from information about hydraulic fracturing - *Darrick Evensen, Cardiff University*
- Cognitive and Social Drivers of Attitudes Toward Using Genetic Engineering for Restoring American Chestnut Trees - *Joshua Petit, Oregon State University*
- Proximity to development and public support for hydraulic fracturing - *Chad Zanocco, Oregon State University*
- Drinking Water Quality Perceptions: Developing a Structural Equation Modeling Approach - *Jonas Leveque, West Virginia University*
- Trust, Risk Perception, and Fish Consumption on a Dioxin Contaminated River: A Michigan Inquiry - *Joseph Hamm, MSU*

National Parks And Climate Change

N380

- Navigating uncharted territory: Management response to climate change and adaptation in the Greater Yellowstone Ecosystem - *Eric Compas, University of Wisconsin-Whitewater*
- Perceptions of Vulnerability and Resilience in Missouri State Parks & Historic Sites due to Extreme Weather Events - *Mark Morgan, Univ. of Missouri*
- Climate Change Impacts in Missouri State Parks: Perceptions from Engaged Park Users - *Lisa Groshong, University of Missouri*
- Climate Change Communication in Missouri State Parks: Perspectives from Park Interpreters - *Vidya Balasubramanyam, University of Missouri*

Conflict Management

N410

- Fighting talk: How do organizations use discourse in the debate over raptor persecution in Scotland? - *Isla Hodgson, University of Aberdeen*
- Human – Elephant Conflict (HEC) Mitigation in Gorongosa National Park: A Policy Analysis - *Krista Lyons, Boise State University*
- Of Bison and Men - Institutional analysis of controversies concerning European bison conservation in Poland - *Krzysztof Niedziałkowski, Institute of Philosophy and Sociology, Polish Academy of Sciences*

Natural Disasters

N420

- The potential use of natural resources in urban informal settlements as substitutes for financial capital during flooding emergencies - *Mwazvita Sachikonye, Rhodes University*
- The Economics of Natural Disasters. - *Mattia Luigi Ratti, SLU, CERE*
- Oysters and Tsunami: Post-Disaster Aquaculture Management and the Politics of Resource Knowledge in Hokkaido, Japan - *Takehiro Watanabe, Sophia University*

Constructions Of Behavior And Meaning In Tourism And Environment

N430

- The Effects of Congruence Relationships between Self Images and Event Brands on Visit Intention - *Tzu Yun Huang, National Taipei University of Education*
- Developing Nature-Based Tourism in Finland – Lessons learned from and Implications to Research - *Liisa Tyrväinen, Natural Resources Institute Finland*
- An inventory of nature-based tourism firms in Norway - *Stian Stensland, Norwegian University of Life Sciences*
- Development of an extended TPB model to measure the intention of the Viennese population to visit alpine summer retreat destinations in response to climate change induced heat waves - *Maria Juschten, University of Natural Resources and Life Sciences Vienna*

Media And Environmental Communication

N440

- A Relational Theory of Place: Propositions and an Exploratory Textual Analysis - *Patricia Stokowski, University of Vermont*
- Trends in the Coverage of Water Issues in Newspapers from the Intermountain West, USA - *Courtney Flint, Utah State University*

- The social construction of nature at Vermont ski areas: Examining nature discourses in tourism mass media - *Margaux Reckard, RSEN, University of Vermont*

Measuring Sustainability

N450

- Poor Metrics: An Experiment in Ecological Footprint Analysis - *Gary Machlis, Clemson University*
- Lost in implementation? REDD+ country experiences in Indonesia and Vietnam with reference to Brazil and Congo - *Thorkil Casse, Roskilde University, Denmark*
- Using Bayesian network analysis to support natural resource management practitioner choices about the policy instruments they employ to engage rural landholders - *Jenifer Ticehurst, Charles Sturt University / Australian National University*

Thursday - 10:30-12:00 Concurrent Sessions

Nature Parks And Green Areas

N300

- The Effects of Environmental Concerns on Beliefs and Attitudes toward Fee Charges for Yangmingshan National Park, Taiwan - *Yann-Jou Lin, National Taiwan University*
- The Factors Influencing Ground Cover Around Flagstone Trails in Taiwan Taipei Da'An Forest Park. - *Yifang Tang, National Taiwan University*
- The role of green areas in encouraging physical activity among physically passive and active peoples' groups - *Marjo Neuvonen, Natural Resources Institute Finland*
- Factors Affecting the Daily Visits to Taipei Zoo - *Ai-Tsen Su, National Taipei University of Education*
- The Effects of Water Types on Microclimate and Thermal Comfort - *Jr-Mei Jhang, National Taiwan University*

Energy Transitions And Climate Change II

N410

- Climate Change Knowledge and Perceptions of Florida Residents: Challenges and Opportunities for Florida Master Naturalists - *Glenn Israel, University of Florida*
- Climate-related beliefs, attitudes and involvement among those involved in rural municipal governance - *Tora Johnson, University of Maine at Machias*
- Evaluating Intergenerational Transfer of Climate Change Concern and Behavior - *Danielle Lawson, NCSU*
- Discourses at the Energy-Climate Nexus: A Comparative Qualitative Analysis Across Utah Energy Communities - *Shawn Olson-Hazboun, Utah State University*
- How Information about Carbon Dioxide Removal Impacts Public Support for Climate Mitigation Policies. - *P. Sol Hart, University of Michigan*

Balancing Conservation And Development

N330

- Natura 2000 Network - a barrier or a benefit for local communities' development in Poland? - *Małgorzata Grodzińska-Jurczak, Jagiellonian University*
- People, parks and policies. Nature conservation governance in post-socialist EU countries - *Natalya Yakusheva, Södertörn University*
- Determining the effects of multi-level values on pro-environmental behavior reported by visitors to Denali National Park and Preserve - *Carena van Riper, University of Illinois*

Environmental Attitudes and Support for Management Practices

N350

- Well-being benefits from urban forests and greenspace for diverse sections of society - *Liz O'Brien, Forest Research*
- Environmental Attitude of Nature Based (International) Tourists in Nepal - *Kamal Thapa, Environmental Friendly Local Governance Programme (EFLG), Besishahar Municipality, Lamjung, Nepal*

- Across the Northern Plains: Comparing Environmental Attitudes, Values, and Practices of Ag Producers in the Great Plains Transition Region - *Joshua Fergen, The Ohio State University*
- Evaluating the Household Dynamics of Wildlife Value Orientations - *Kalysha Clark, NC State University*

Balancing Between Peri-urban And Rural Realities

N360

- Rural Realities between Policy Goals, Market Forces and Natural Disasters – a Narrative of Local Forest Management in Southern Sweden - *Ida Wallin, Swedish University of Agricultural Sciences*
- Transitioning towards small-scale farming: The role of beginning farmer communities - *Keri Iles, Purdue University*
- Communication, information sources, and the rural-urban divide: A qualitative investigation into challenges facing natural resource management in an American Midwestern agricultural watershed - *Joseph Nowak, University of Minnesota*
- Visitors roaming private farm land in the peri-urban area of Greater Copenhagen – landowners' perceptions and management perspectives. - *Søren Præstholt, University of Copenhagen, Denmark*

Gender And Environmental Change

N430

- Understanding decision-making of women and its effect on income diversification and food security - *Jennifer Zavaleta, University of Michigan*
- Feminist reflections on rice policy change and practice adaptation in Central Vietnam - *Jennifer Bond, Charles Sturt University*
- “It’s a boy’s club”: Perceptions of barriers to successful land management from women non-operating landowners in the Midwestern United States - *Ennea Fairchild, Utah State University*

The Role Of Local Actors In Conservation And Development

N450

- Barriers to Citizen Science: Investigating Pre-Participant Family Forest Landowners in a Wildlife Monitoring Case Study - *Anna Buckardt, University of Maine*
- Recreational Resources Users in South Dakota: Public Lands Use, Access, and Conservation - *Candace May, South Dakota State University*
- Public participation in Norwegian protected area governance – the role of advisory councils - *Sigrid Engen, The Arctic University of Norway*

Society & Natural Resources and Student Paper Awards

The Editors and Editorial Board of Society & Natural Resources are pleased to announce SNR's second annual "Rabel J. Burdge and Donald R. Field Outstanding Article Award"



Selected as the best general research article in SNR for 2016 (Vol.29) is the article by **Heather O'Leary**, "Between Stagnancy and Affluence: Reinterpreting Water Poverty and Domestic flows in Delhi, India," *Society & Natural Resources* 29(6): 639-653. The award is supported with a \$500 cash prize by SNR's publisher, Taylor & Francis. The winning article was chosen through a competitive process by *Society & Natural Resources'* Editors and Editorial Board, who judged it SNR's 2016 "Outstanding Article" for its innovative and meaningful contribution to the study of society and natural resources that promises to be influential over time.

2017 Student Paper Competition - Best Paper Submitted by a Doctoral Student



Selected as Best paper submitted by a Doctoral student in the Student Paper Competition was **Marian Hubbard-Rice**, "Caffeine Demonstrates Anthropogenic E. coli: Drives Policy Change" which will be presented Wednesday, June 21, 15:30-17:00 - "Policy Reform," Naturvetarhuset, N440. This interdisciplinary paper demonstrates the use of science to drive policy implementation, using the case of Emigration Creek in Salt Lake County Utah. This paper hypothesizes that the identification of caffeine as an anthropogenic source of pollution – as opposed to suggestions of wildlife and pets – served to drive policy change.

Society & Natural Resources Editors David A. Sonnenfeld and Peter Leigh Taylor also wish to thank all the following Editorial Board members for their continuing service and commitment to SNR. In addition, the Editors would like to acknowledge the critical contributions of hundreds of expert peer reviewers from around the world, and across many disciplines. Thank you!

Kerry Ard • Ruth Beilin • Jill M. Belsky • Melinda Harm Benson • Steven R. Brechin • Joan Brehm • Timothy Collins • Kishi Animashaun Ducre • Yvonne Everett • Courtney Flint • Lotsmart Fonjong • Tasos Hovardos • Tomas Koontz • Kelli Larson • Mark Lubell • Richard D. Margerum • Frank Matose • Tara McGee • Thomas Measham • Wayde Morse • S. Ravi Rajan • Robert Richardson • Michael L. Schoon • William D. Sunderlin • Marc Stern • Travis Warziniack • Lei Zhang

Conference announcement



9th International Conference on Monitoring and Management of Visitors in Recreational and Protected Areas (MMV), Bordeaux, France, August 29th-31st, 2018

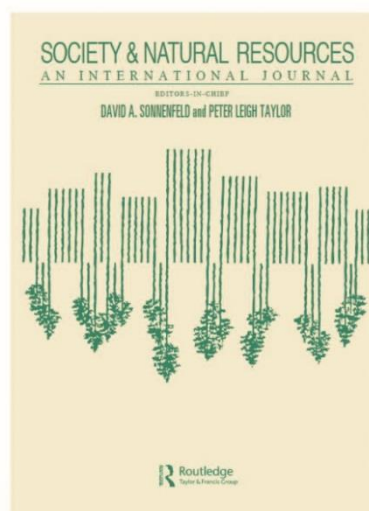
PLACE, RECREATION AND LOCAL DEVELOPMENT

The MMV conference provides a forum for presentations and exchanges of research, ideas and experiences related to the monitoring and management of visitors in recreational and protected areas. We welcome researchers, managers, consultants, policy makers, planners, members of NGO's and other professionals dealing with visitor management in recreational and protected areas.

Call for session proposals coming in fall 2017!

Contact: mmv9@sciencesconf.org **Site web:** <https://mmv9.sciencesconf.org/>





David A. Sonnenfeld
*SUNY Environmental Science
and Forestry*

Peter Leigh Taylor
Colorado State University

Open Access Articles

Standing Up for Inherent Rights:
The Role of Indigenous-Led
Activism in Protecting Sacred
Waters and Ways of Life
Emma S. Norman

The Intricacies of "Being Able
to Work Undisturbed": The
Organization of Alluvial Gold Mining
in Bolivia
Ton Salman

Why Has Human-Carnivore Conflict
Not Been Resolved in Namibia?
Niki A. Rust et al.

SOCIETY & NATURAL RESOURCES

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**Thanks for this year,
and welcome to the next ISSRM in Utah in 2018!**

A woman with blonde hair, wearing a red long-sleeved shirt, dark blue shorts, and a backpack, is hiking on a rocky trail. She is looking down at her feet. The background shows a vast mountain range under a blue sky with some clouds.

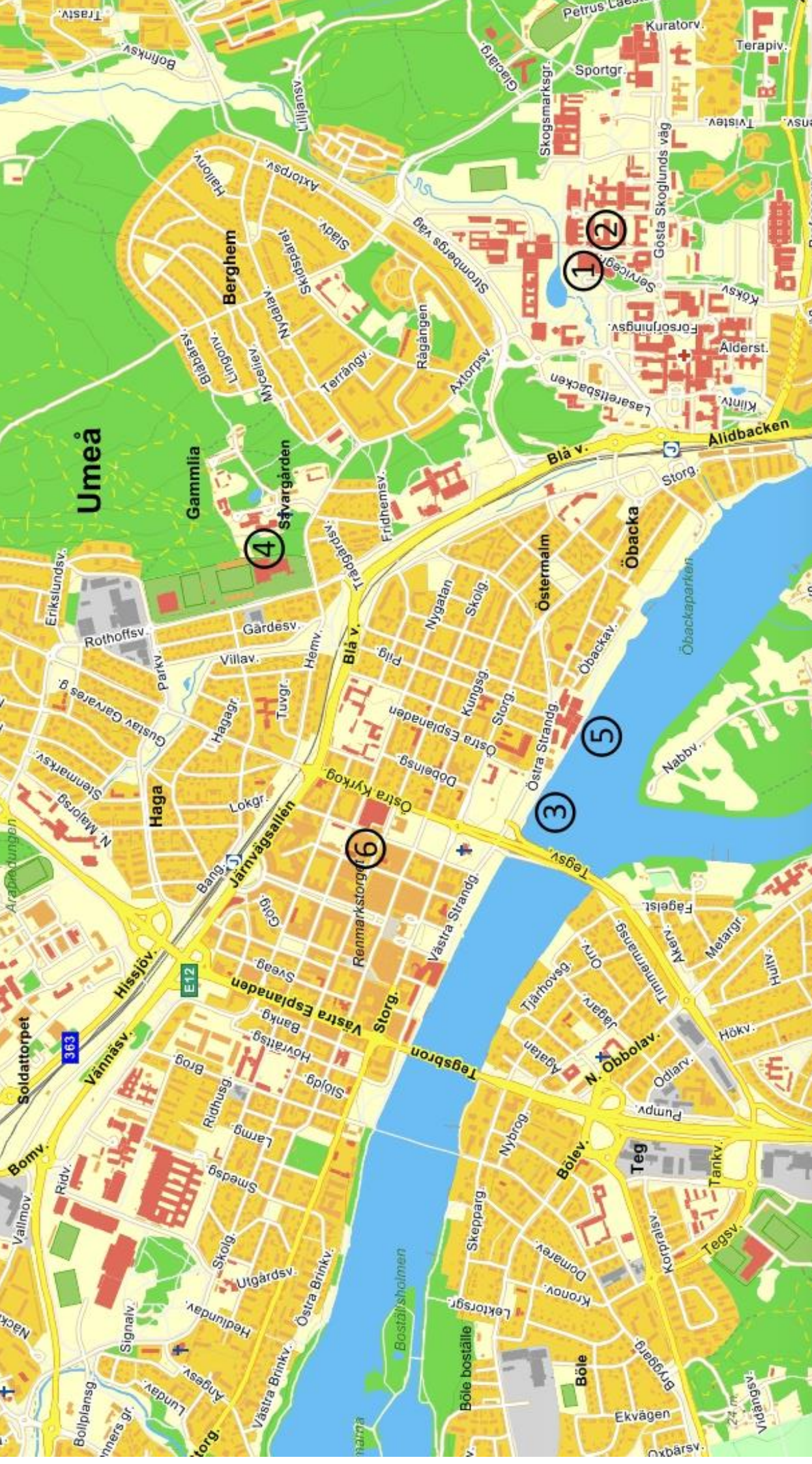
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