# BOOK OF ABSTRACTS



## I. SESSION DESCRIPTION

### ID: T18c

Results-based approaches and other integrated models as drivers for ecological conservation and policy integration

### Hosts:

| | Title | Name | Organisation | E-mail |
|---|---|---|---|---|
| Host: | | Gary Goggins | LIFE IP Wild Atlantic Nature | gary.goggins@housing.gov.ie |

### Abstract:

"The primary driver behind the deterioration of Europe's most important habitats is pressure from land uses, including agriculture and other commercial activities. Damaging activities on the ground are diverse and include inappropriate grazing regimes, drainage, invasive species, and exploitation of natural resources (e.g. forestry, fishing and peat extraction). These activities often arise as a result of divergent messages from broader agriculture, nature, water, climate and socio-economic policies. Associated with each of these polices are a wide range of actors responsible for their implementation. Although, in some instances, interaction between these actors is improving, within a fully coherent land use framework, meeting individual targets for nature or climate will be increasingly challenging.

A failing of many restoration or conservation projects is the fragmented approach taken (e.g. focusing on the specific actions of restoration, etc.) without the understanding of the wider socio-economic context, including the perspective of landowners and land managers. In response, new multi-dimensional, multi-actor models for incentivising ecological restoration are emerging. For example, results-based approaches attempt to establish a clear link between ecological quality and sustainable land management. The basic principle of a results-based approach is reward (e.g. agri-environment payments) that is proportionally related to the environmental quality delivered on the ground, i.e. higher ecological quality receives a higher payment. The over-riding benefit of the results-based approach is the long-term sustainable management of the overall managed landscape, particularly in regions where a significant proportion of land is actively farmed.

This session will explore the potential for results-based approaches and other emerging models to incentivise ecological conservation and restoration as well as the integration of policy and consideration of divergent actors' views. Submissions are welcome on a range of related topics including, but not limited to, the design and implementation of integrated land-use approaches; implementation of multi-actor frameworks; evaluation of the efficacy

of results-based approaches; perspectives of farmers, landowners and land managers; results-based approaches and sustainable transitions. Papers with a strong social science component are particularly welcome."

### Goals and objectives of the session:

This session aims to:

- explore the potential for results-based approaches and other emerging models to incentivise ecological conservation and restoration.
- provide insights into the integration of various policies related to sustainable land-use
- examine multi-actor approaches and incorporation of perspectives and views of divergent actors.
- consider how social science approaches can inform good practice for ecological restoration.

### Planned output / Deliverables:

Contributions (e.g. papers/presentations) on a range of related topics including, but not limited to, the design and implementation of integrated land-use approaches; implementation of multi-actor frameworks; evaluation of the efficacy of results-based approaches; perspectives of farmers, landowners and land managers; results-based approaches and sustainable transitions.

### Session format:

Standard session (presentations)

### Voluntary contributions accepted:

Yes, I allow any abstract to be submitted to my session for review

### Related to ESP Working Group/National Network:

Thematic Working Groups: TWG 18 – Governance & Institutional aspects

## II. SESSION PROGRAM

**Date of session:** Wednesday, 12 October
**Time of session:** 16.00 – 18.00

### Timetable speakers

| Time | First name | Surname | Organization | Title of presentation |
|---|---|---|---|---|
| 16.03 | Craig | Bullock | University College Dublin | Drawing on local socio-ecological and land use knowledge for the co-design of restoration |
| 16.16 | Ann | Lévesque | Université du Québec en Outaouais | Expressing citizen preferences on endangered wildlife for building socially appealing species recovery policies: a stated preference experiment in Quebec, Canada |

| Time | First name | Surname | Organization | Title of presentation |
|---|---|---|---|---|
| 16.29 | Clémence | Dirac | Federal Office for the Environment (FOEN) | How to integrate the expectations of the Swiss population in the national forest policy? |
| 16.42 | Améline | Vallet | AgroParisTech | Weaving knowledge systems on Nature's Contributions to People: Medicinal plants in Peru |
| 16.55 | Charl Justine | Darapisa | University of the Philippines Diliman | Friend or Foe: Identifying the Effects of the National Greening Program on Indigenous Peoples and Local Communities in the Philippines through Scenario Building |
| 17.08 | Phyllis B. | Posy | Posy Global | Communicating Knowledge to Policy Makers: Bringing Socio-Economic Perspectives to Better Freshwater Restoration Decision Making |
| 17.21 | Dieter | Mortelmans | INBO | Shifting towards result based agri-environmental measures and simultaneously achieving policy integration in rural municipalities faced with high land pressures: lessons learnt from case studies in Flanders, Belgium |
| 17.34 | István | Szentirmai | Őrség National Park Directorate | Co-creating contracts for farmers and nature: a case study from Őrség National Park, Hungary |
| 17.47 | Gary | Goggins | LIFE IP Wild Atlantic Nature | Improving conservation and restoration of wetlands in Ireland through results-based approaches |
| 18.00 | Finish | | | |

# III. ABSTRACTS

*Abstracts are ordered based on the session program. The first author is the presenting author unless indicated otherwise.*

*1. Type of submission: Abstract*

T. Thematic Working Group sessions: T18c - Results-based approaches and other integrated models as drivers for ecological conservation and policy integration

## Co-creating contracts for farmers and nature: a case study from Őrség National Park, Hungary

*Presenting author: István Szentirmai*
*Other author(s):* Eszter Czibik, Eszter Kelemen
*Affiliation*: Őrség National Park Directorate, Hungary
*Contact*: i.szentirmai@gmail.com

Current action based agri-environmental and climate measures (AECMs) are ineffective in preserving farmland biodiversity. One reason for this failure is that prescribed measures are not properly adjusted to local conservation objectives, another reason is the reluctance of farmers to participate in these voluntary programmes.

We started to develop innovative contractual solutions in the Őrség National Park, Hungary with the participation of local stakeholders and experts in 2019 within the Contracts2.0 project. Through a series of participatory workshops, we identified result-based and value chain as the two most promising contracts. However, key actors and implementation processes of these two contract types are different: public administration is more responsible for setting up the result-based contract, while local farmers and producers are better placed to initiate the value chain contract.

During the project we offered opportunities for co-creating the contractual solution with local stakeholders, experts, and policy makers. For instance, in the case of the result-based contract, we chose grasslands as the target of the planned contract as they were among the most highly valued ecosystems by local citizens. Afterwards, we held workshops with biologist experts to narrow down the biodiversity target to species-rich hay meadows and define conservation objectives (e.g. reducing invasive plant cover, enhancing plant species diversity). Targets were then discussed with local farmers, and other elements of the planned contract were further specified (e.g. preferred length, type of monitoring etc.). Indicators were defined at another expert workshop, and tested in the field between May and July in 2021 and 2022; in some cases together with the farmer. The preliminary results show that (i) farmers are more positive towards AECMs if they are part of the planning process, (ii) farmers are willing and capable to measure indicators, but (iii) engagement and support of policy makers is also crucial for a well-functioning contract.

*Keywords*: co-creation, participatory workshops, agri-environmental-climate measures, result-based contracts, value chain contracts

*2. Type of submission: Abstract*

T. Thematic Working Group sessions: T18c - Results-based approaches and other integrated models as drivers for ecological conservation and policy integration

# Friend or Foe: Identifying the Effects of the National Greening Program on Indigenous Peoples and Local Communities in the Philippines through Scenario Building

*Presenting author: Charl Justine Darapisa*
*Affiliation*: University of the Philippines Diliman, College of Architecture, Philippines
*Contact*: cbdarapisa@up.edu.ph

The Mangyan Iraya tribe (MIT) practices endogenous mechanisms in forest conservation. To them, nature conservation is simple; continuous mutual respect between the tribe's Gods and the MIT in return for agricultural abundance and good health. However, this synergy begins to change through time as government projects intervene. A good example is the National Greening Program (NGP) which targets to plant 1.5 billion trees in collaboration with Indigenous Peoples and Local Communities (IPLCs). Incentivization of reforestation poses challenges to marginalized communities with little to no financial literacy. Furthermore, greening projects that promise financial stability through results-based reforestation are highly dependent on multiple ecological factors oftentimes unfavorable to the participants. Hence, this research analyzes the effects of the NGP on the long-perused traditional forest conservation of the MIT in the Philippines. We argue that the heavy reliance of the Mangyan Iraya tribe to NGP projects slowly causes deterrence in the practice of IPLCs' forest conservation. Through scenario building, results reveal that participating in NGP causes (a) the MIT to pause their traditional hunting-gathering-farming practices later (b) hindering the transference of Indigenous knowledge to the younger generation. This is a rather tricky road for community-based conservation because such hindrance (c) causes the dissipation of heritage critical in developing a clear picture of one's identity. We propose that monetary conservation-policy models should have the flexibility for localization through (a) equitable knowledge-sharing before policy implementation, and enhanced networking-building focusing on financial management. Relatively young policy models may explore social science-based approaches like scenario building to touch base among IPLCs. This places local communities at the center of ecological restoration-knowledge co-production.

*Keywords*: monetary-based conservation, reforestation policy, social learning, Indigenous Peoples and Local Communities, conservation knowledge, knowledge co-production

*3. Type of submission: Abstract*

T. Thematic Working Group sessions: T18c - Results-based approaches and other integrated models as drivers for ecological conservation and policy integration

# How to integrate the expectations of the Swiss population in the national forest policy?

*Presenting author: Clémence Dirac*
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*Contact*: clemence.dirac@bafu.admin.ch

The Federal Office for the Environment (FOEN) uses socio-cultural forest monitoring (WaMos) to examine the resident population's relationship to the Swiss forest over the years. The latest WaMos study was done from 20 February to 9 March 2020 (just before the first COVID lockdown in Switzerland). It was a representative national online survey with a sample of 3,116 interviews plus a selection of 156 young people between 15 and 18 years old. 10 cantons participated financially to the study to further increase the samples size in their regions. The results of the 2020 study could be compared with the ones of 1997 (WaMos 1) and 2010 (WaMos 2).

By conducting a forest survey among the Swiss population every 10 years, the FOEN pursues the following objectives: to understand how the inhabitants of Switzerland perceive the forest and what are their expectations of this ecosystem, so that a forest policy can be developed that everyone will accept. More specifically, the WaMos 3 study was designed to answer these questions:

- How does the population currently perceive the forest and its forest ecosystem services?
- What is the evolution of the population's perception over time (comparison with surveys from 2010 and 1997)?
- What do the findings mean for the federal forest policy?

The most important results for the forest policy stakeholders are the following:

- The population supports an integral forest policy (protection and use of the forest)
- The forest is still popular - especially for recreation
- The population wants to protect the forest in its area and quality
- The population appreciates the manifold forest ecosystem services

The author will present the results of the study in more details and conclude by commenting on the adequacy of the resident population's perception of Swiss forests with the objectives of the national forest policy.

*Keywords*: forest, socio-cultural monitoring, national forest policy, Switzerland, acceptance

*4. Type of submission: Abstract*

T. Thematic Working Group sessions: T18c - Results-based approaches and other integrated models as drivers for ecological conservation and policy integration

# Weaving knowledge systems on Nature's Contributions to People: Medicinal plants in Peru

*Presenting author: Améline Vallet*
*Other author(s):* Bruno Locatelli, Merelyn Valdivia-Díaz
*Affiliation*: AgroParisTech,
*Contact*: ameline.vallet@universite-paris-saclay.fr

Sustainability science needs new approaches to produce, share, and use knowledge. Multiple actors hold relevant knowledge for sustainability, including Indigenous and Local People who have developed over generations knowledge, methods, and practices that must be captured in biodiversity and ecosystem assessments. However, despite recent efforts to mainstream knowledge co-production, less than 3% of the literature on Nature's Contributions to People (NCP) integrates Indigenous and Local Knowledge (ILK): approaches and tools to better weave scientific and ILK knowledge systems in NCP assessments are thus urgently needed. In this paper, we offer novel insights on how to weave ILK into NCP assessments. We present an original combination of social science methods, ethnoecology and participatory research to co-produce knowledge with ILK experts in a place-based NCP assessment, showcased for medicinal plants in the Peruvian Andes. Using the IPBES conceptual framework, we defined the meaning of a good quality of life according to local worldviews and found that medicinal plants contributed strongly to health and household security, among others. We inventoried a total of 56 medicinal plants used to treat different illnesses. We analyzed the spatial distribution of the seven most important plants and their non-medicinal uses. Climate change and overexploitation were the main threats to medicinal plants despite the existence of formal and customary institutions to regulate trade. Our approach was flexible enough to deal with diverse forms of knowledge, as well as qualitative and quantitative information, for instance using Bayesian Belief Networks. Our study responds to previous calls for assessments of medicinal plants as NCP, and to several of the knowledge gaps identified recently by IPBES in its recent sustainable use of wild species assessment.

*Keywords*: Transdisciplinary research; Ecosystem services; Wellbeing; Traditional medicine; Ethnopharmacology

*5. Type of submission: Abstract*

T. Thematic Working Group sessions: T18c - Results-based approaches and other integrated models as drivers for ecological conservation and policy integration

# Shifting towards result based agri-environmental measures and simultaneously achieving policy integration in rural municipalities faced with high land pressures: lessons learnt from case studies in Flanders, Belgium.

*Presenting author: Dieter Mortelmans*

*Other author(s):* Francis Turkelboom, Sven Defrijn

*Affiliation*: INBO, Belgium

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Many Flemish rural municipalities that possess valuable natural areas, are facing high land pressures, mostly due to their proximity to major urban nodes and ever-increasing urban sprawl. This pressure often means those municipalities are subjected to numerous overlapping, sometimes incoherent or competing sectoral policy objectives impacting their landscape. These policy objectives reflect the large range of societal needs and demands for ecosystem services (and other needs and demands…) in rural landscapes in the urban fringe. Simultaneously, rural municipalities and family sized farms operating in those municipalities have pinpointed administrative overload and sometimes conflicting policy objectives as key bottlenecks. Policy integration at landscape scale has therefore been identified as a key priority to relieve under capacitated/understaffed rural municipalities and family farms facing numerous market and environmental challenges.

Using examples from case studies in Flanders within the Contracts 2.0 project, we show that a switch from action-based contracts towards result based agri-environmental measures/contracts, combined with a co-creative and participatory approach including governmental agencies together with local stakeholders to construct a common landscape vision, helps to foster this policy integration. For example, the use of scoreboards to integrate and quantify otherwise generic landscape objectives helps to establish a structured, locally relevant dialogue among policymakers that sets the baseline for further policy integration. This example also suggests that policy integration can be improved even when policy domains are mostly sectorally organized, without requiring an intrusive (and arguably hard to achieve in the short term) governance shift towards new governmental agencies with broader mandates to supersede or steer sectoral agencies.

*Keywords*: result based contracts, policy integration, agri-environmental measures, innovative governance, rural municipalities

*6. Type of submission: Abstract*

T. Thematic Working Group sessions: T18c - Results-based approaches and other integrated models as drivers for ecological conservation and policy integration

# Communicating Knowledge to Policy Makers: Bringing Socio-Economic Perspectives to Better Freshwater Restoration Decision Making

*Presenting author: Phyllis B. Posy*
*Other author(s):* Zuzana Boukalova, Balázs Lukács
*Affiliation*: Posy Global, Israel
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Restoration projects can fail if launched and funded without adequate appreciation of the wider socio-economic context, including the perspective of landowners and land managers, scientists and the media. All too often, funding decisions are confusing because of the overwhelming - even contradictory - plethora of scientific statistics and economic analyses.

EcoAdvance, a Coordination and Support Action funded by the European Union's Horizon Europe research and innovation programme under grant agreement No. 101060497, is taking a different tack: The project will distill success factors into a context sensitive checklist to help bring a wide range of voices to the table to share their expertise and experience. EcoAdvance will "Showcase" the journeys of leading advocates, journalists, politicians, engineers and scientists who have contributed to freshwater restoration in each of the EU Member States. This will help to bring cultural, country, social and economic perspectives into focus to communicate new knowledge and methods to help decisionmakers integrate scientific theory with practical restoration methods and solutions and help achieve the Biodiversity 2030 strategy goals more effectively and efficiently.

EcoAdvance will promote those who "Did-It" in each Member State and who galvanized their communities to address freshwater restoration challenges. Whether they used media, scientific, political or social terminology to communicate the urgency, feasibility and potential for freshwater restoration projects, the stories of their journeys have great potential to guide others, and reduce the risk of funding restoration projects that, despite initial or on-paper success, ultimately disappoint.

."Showcases" will raise the visibility of people and projects that contributed to freshwater restoration successes in each Member State. The team is now looking for people with stories to tell regarding freshwater ecosystem restoration projects – including details of both successes and failures, challenges faced, factors quantified or considered, issues overcome, frustrations addressed.

*Keywords*: Freshwater Restoration, Funding Successful Projects, Socio-Economic Context, COmmunicating Policy

7. *Type of submission: Abstract*

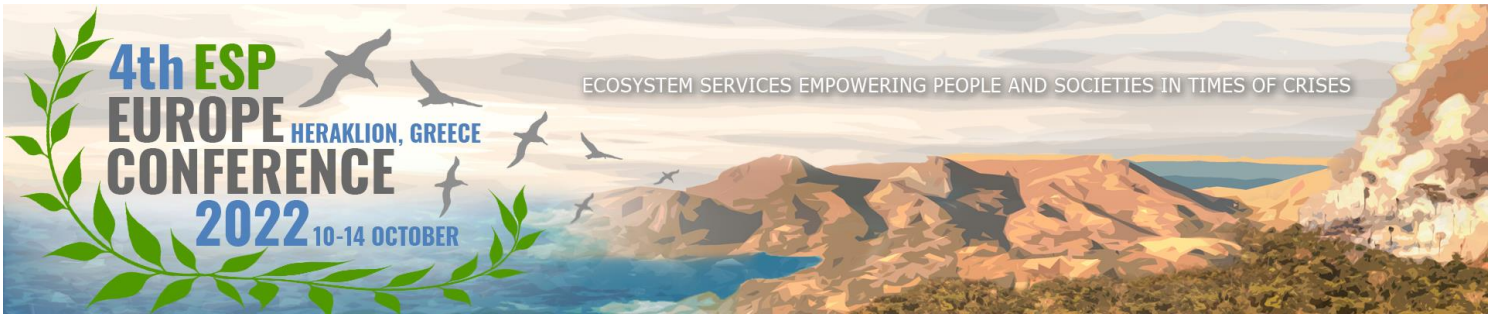
T. Thematic Working Group sessions: T18c - Results-based approaches and other integrated models as drivers for ecological conservation and policy integration

# Drawing on local socio-ecological and land use knowledge for the co-design of restoration

*Presenting author: Craig Bullock*
*Other author(s):* Shane McGuinness
*Affiliation*: University College Dublin, Ireland
*Contact*: craig.bullock@ucd.ie

WaterLANDS is an EU Horizon 2020 project which commenced in December 2021 and is directed at upscaling the restoration of wetlands. It is one of four projects funded under the Green Deal Call for the Restoration of Biodiversity and Ecosystem Services , with the other "cluster" projects, Merlin, Rest-Coast and Superb, examining freshwater, coastal and forest restoration respectively. The essential rationale is that only through an upscaling of restoration can we aspire to safeguarding biodiversity, and to achieving tangible ecosystem service contributions to reducing greenhouse gas emissions, securing water supply/quality, and mitigation of extreme weather events and sea level rise. The urgency of this endeavour is underpinned by the new EU Nature Restoration Law published in June. However, restoration of wetlands to date has been limited in scale, connectivity and longevity. WaterLANDS aims to input to this experience by drawing on existing best practice at our network of “Knowledge Sites” and applying this to physical restoration at six "Action Sites" across the continent. Co-design with communities and key stakeholders will be fundamental to the project's success. At our Irish Action Site, a results-based payment approach is being applied, drawing on farmers' intimate relationship with the land to advance restoration which delivers societal benefits. Stakeholder characteristics vary across our Action Sites, but at each location the emphasis is on exploring how we can apply restoration based on local knowledge to deliver local benefits, while at the same time, contributing to priorities at a societal and global level, namely biodiversity gains and adaptation to climate change. The presentation will discuss how we propose to balance these outputs with examples from locations represented in the project and the Green Deal restoration cluster.

*Keywords*: wetlands, restoration, ecosystem services, results-based, co-design




*8. Type of submission: Abstract*

T. Thematic Working Group sessions: T18c - Results-based approaches and other integrated models as drivers for ecological conservation and policy integration

# Expressing citizen preferences on endangered wildlife for building socially appealing species recovery policies: a stated preference experiment in Quebec, Canada

*Presenting author: Ann Lévesque*

*Other author(s):* Lynda Gagné, Jérôme Dupras

*Affiliation*: Département des sciences naturelles, Université du Québec en Outaouais, Canada,

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Over the past fifty years, the world's wildlife populations have drastically declined. This stems from multiple causes, including the loss of natural habitat, which plays a vital role. Effective strategies to help endangered wildlife species recovery requires broad public support to be politically viable. In this study, we conducted a randomized survey to elicit and describe the Quebec population's preferences and concerns regarding endangered wildlife and estimate its willingness-to-pay (WTP) for their recovery. We used stated preference approaches, namely a discrete choice experiment (DCE) and best-worst scaling (BWS), to estimate WTP and rank respondent preferences towards categories of wildlife species and recovery program attributes. In the selection of animals listed, results also reveal strong public preferences for large mammals, more specifically the beluga whale and woodland caribou. Simulation exercises from our DCE results show that a quarter of respondents would be willing to pay $160 per year for a megafauna recovery program compared to $12 for birds, or insects, or fish and molluscs recovery programs. Despite respondents' strong preferences for the protection of megafauna, BWS and DCE simulation results indicate that a broader multispecies approach would be favoured by a larger segment of the population than a single specie approach. The survey results also revealed that the public likes to spend time in nature and is both concerned about endangered wildlife and aware of the interdependence between humans and nature. Therefore, our findings suggest that policymakers have a social acceptance to use both flagship species and multispecies approaches to implement endangered species recovery strategies. Moreover, our findings and the related literature on the value of ecosystem services indicate that communication on

wildlife conservation could be buttressed by emphasizing conservation's contributions to ecosystem services

*Keywords*: threatened species, discrete choice experiment, conservation communication, flagship species, ecosystem services