



A researcher's inside experiences from global fora: IPBES assessments and CBD negotiations and technical expert groups

Zsolt Molnár (botanist, ethno-ecologist)

Centre for Ecological Research

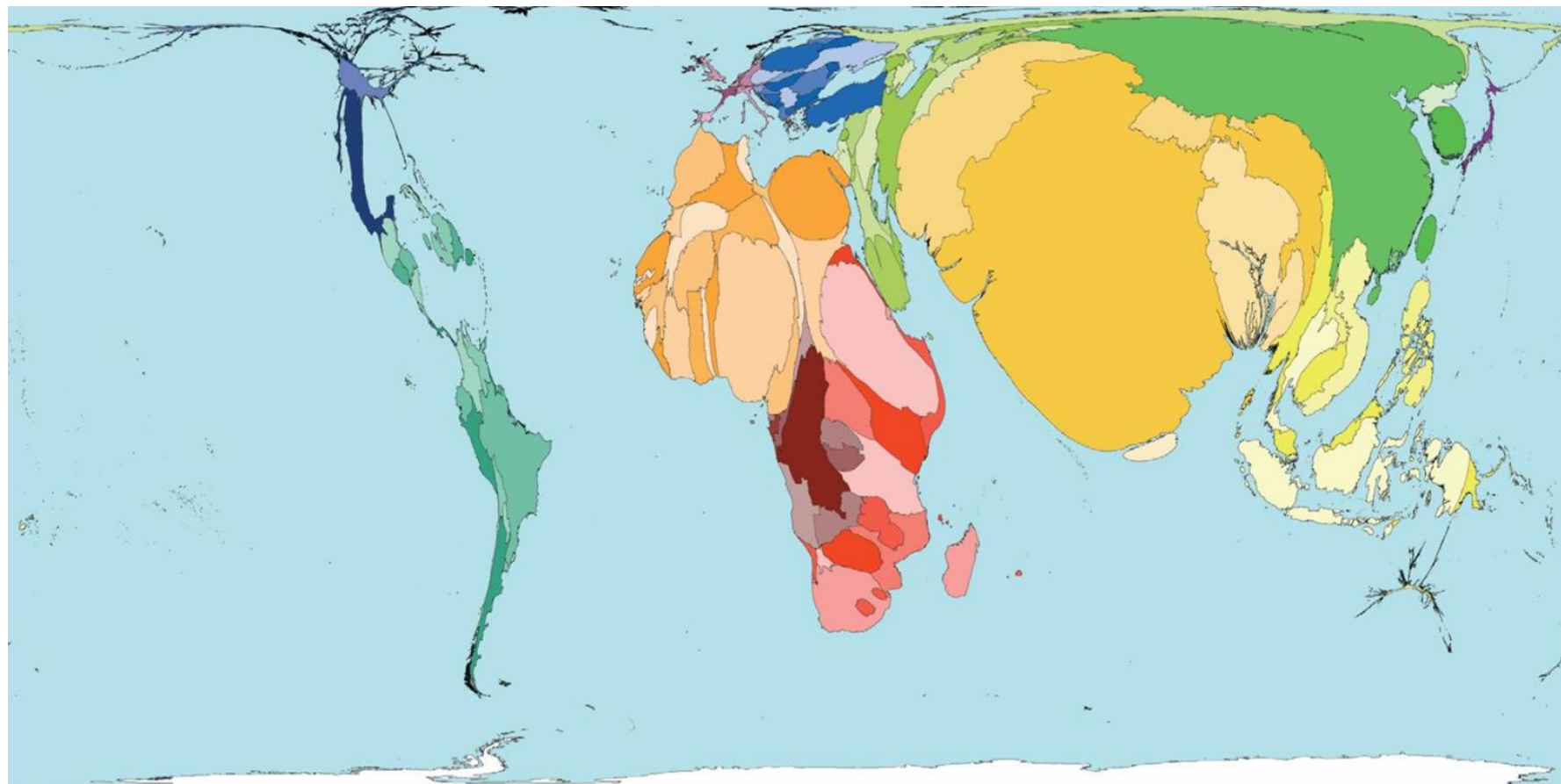
Capacity Building Workshop for Hungarian, Romanian and Polish
experts and negotiators / 15-16 January 2024 / Budapest, Hungary



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Data SIO, NOAA, U.S. Navy, NGA, GEBCO
Image Landsat / Copernicus
Image IBCAO
Image U.S. Geological Survey

Képek dátuma: 12/14/2015 44°42'31.90" É 20°40'17.50" K s



My participation in global fora

- Indigenous and Local Knowledge Task Force of IPBES (2014-2023)
- Lead author in the Europe and Central-Asia Assessment, head of the ILK liason group
- Coordinating lead author in the Global Assessment (Nature subchapter) (2016-2018)
- IPBES expert at CBD COP14, Egypt
- Independent expert in the AHTEG on indicators of the KMGBF (2023-2024)
- Independent expert in the AHTEG on 8j and related provisions (traditional knowledge)
- Expert member of the Hungarian delegation at various IPBES and CBD meetings

The plenaries



The plenaries

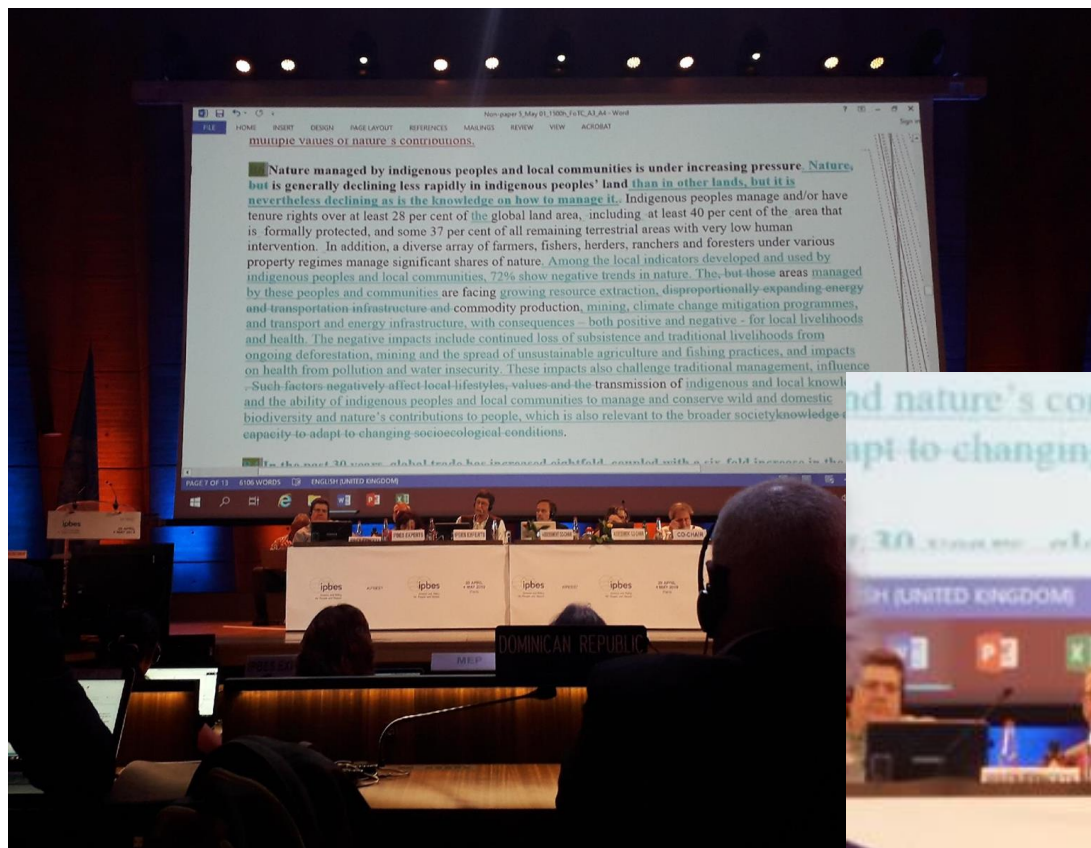


The plenaries



The plenaries

At 1:30am in Paris (Plenary discussion of the SPM of IPBES GA)

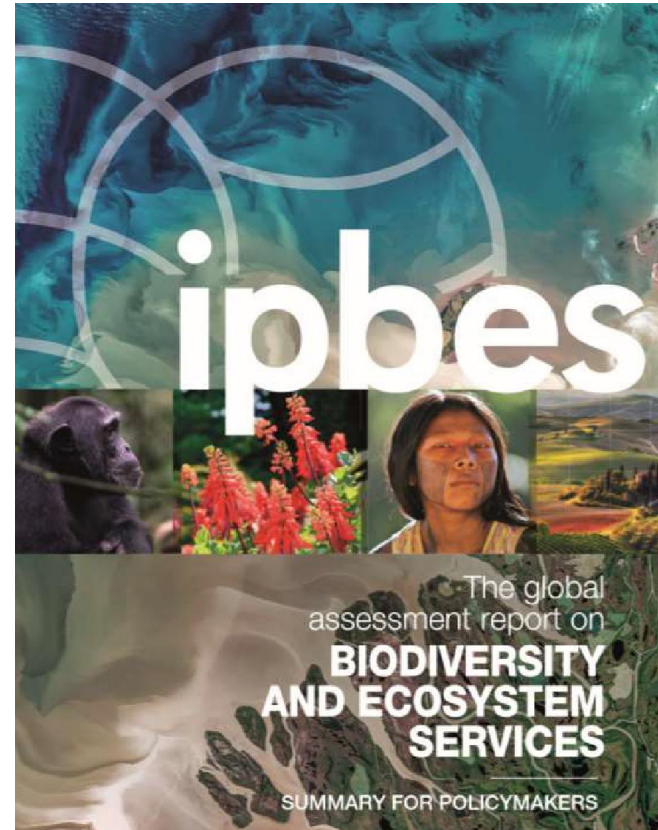


Great friendships, great colleagues



Andy Purvis

David Obura



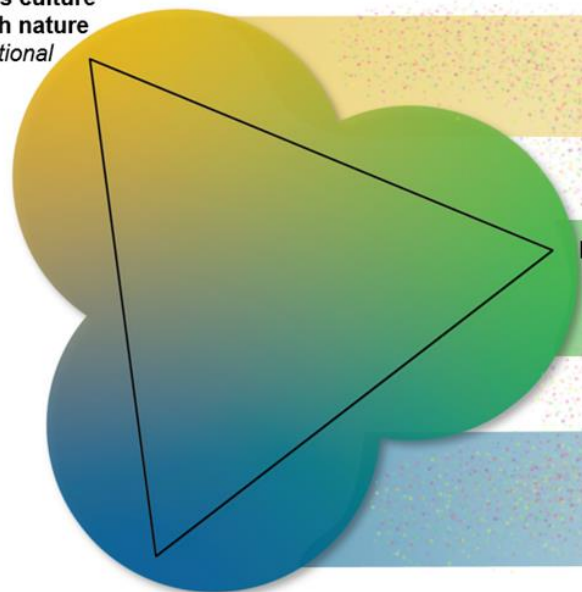
Contact groups





Nature Futures Framework

Nature as culture
One with nature
Relational



Nature for nature
Intrinsic

Nature for society
Instrumental

Mother Earth
Systems of life

Living in harmony
with nature

Nature's Gifts

Living well in balance
and harmony with
Mother Earth

Contact groups



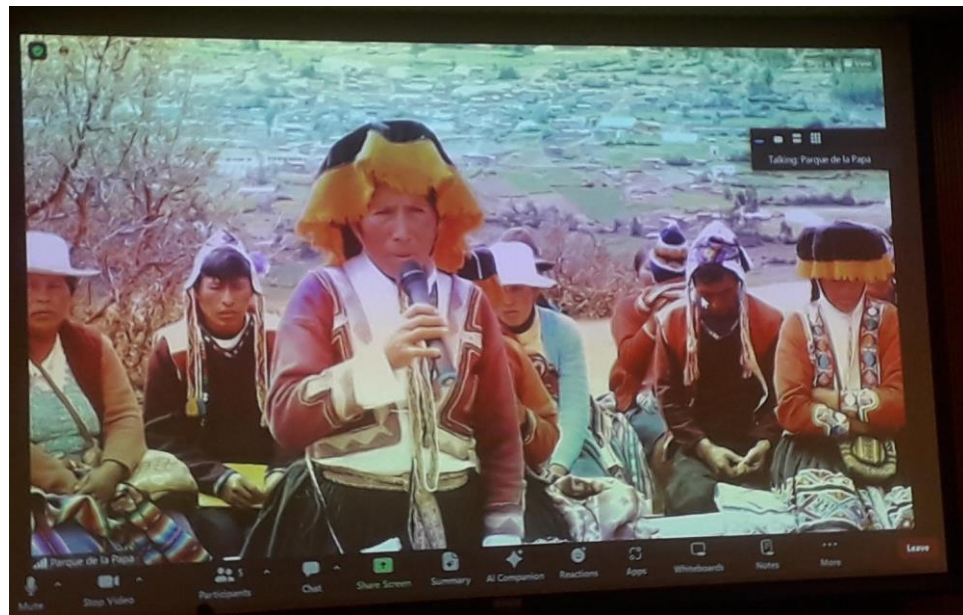
Contact groups



Expert groups (AHTEGs)



Side events



Side events

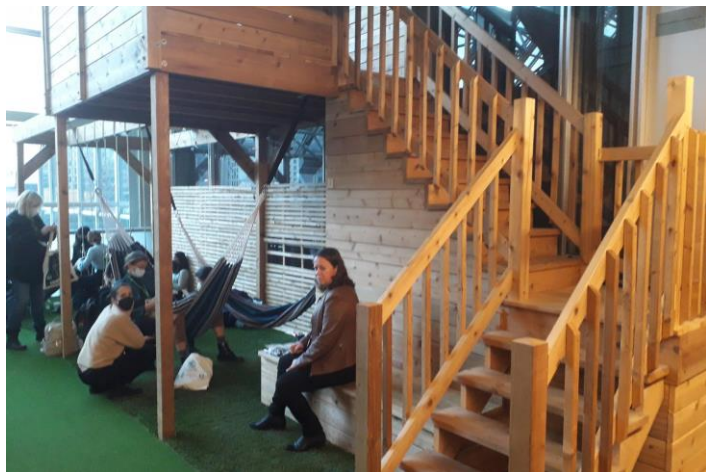


Dialogue workshop (Europe and Central Asia Assessment, Paris, 11-13. January 2016)

Knowledge co-production



Corridors, coffee breaks, markets



Evenings (if not spent in the contact group)



Evenings (if not spent in the contact group)



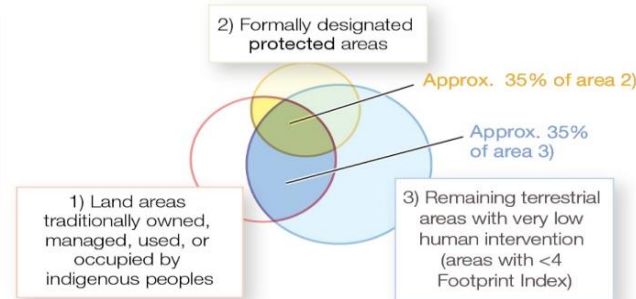
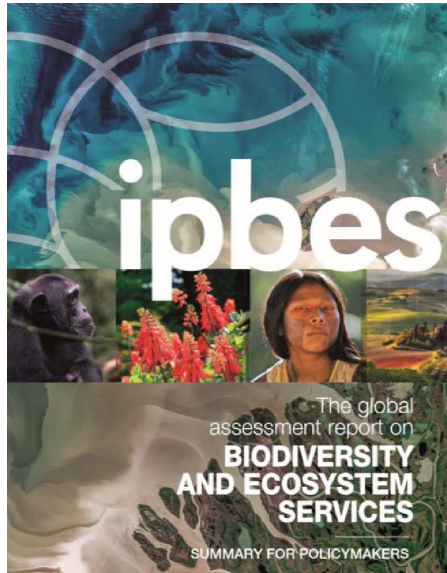


What we, scientists can contribute, what we can learn?

Science – Policy

Policy – Science

Contributions of Indigenous Peoples and Local Communities: knowledge, innovations, practices, and institutions



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Programme of work on Article 8(j) and other provisions of the Convention on Biological Diversity related to indigenous peoples and local communities to 2030

Traditional knowledge is adaptive

So some parts are not yet tested

Knowledge co-production with science can help speed up testing/adaptation

Promote the co-production of knowledge between indigenous peoples and local communities, scientists and other stakeholders towards the **generation of new knowledge** necessary for the **resilient adaptation** and continuation of customary sustainable use practices by indigenous peoples and local communities and the conservation of biodiversity **under rapid environmental change**.

4.7 Promote the co-production of new knowledge by indigenous peoples and local communities, scientists and other stakeholders necessary for the resilience, adaptation and continuation of customary sustainable use and biodiversity conservation practices under rapid environmental change, by indigenous peoples and local communities, particularly the roles and needs of women, girls and youth], such as climate change, land- and sea-use change, invasive alien species and pollution].

BIODIVERSITY AND ECOSYSTEMS

Assessing nature's contributions to people

Recognizing culture, and diverse sources of knowledge, can improve assessments

By Sandra Díaz, Unai Pascual, Marie Perle, Robert T. Watson, Zolt Molnár, Rosemary Hill, Kai M. A. Chan, Ivor A. Bente, A. Brauman, Stephen Polasky, Andrew Church, Mark Lonsdale, Anne Larigauderie, Paul W. Leadley, Alexander P. E. van Oudenhooven, Feli Cervera del Plá, Matthias Schröter, Sandra Lavorel, Yibin Aumeeruddy-Thomma, Elena Balvanera, Kirsten Davies, Sébastien Desjardins, Gunay Erpul, Pierre Follmer, Carlos A. Guerra, Chad L. Hewitt, Hans Konn, Sarah Lindley, Yoshiko Shirayama

A major challenge today and into the future is to maintain or enhance beneficial contributions of nature to a good quality of life for all people. This is among the key motivations of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES), a joint global effort by governments, academia, and civil society to assess and promote knowledge of Earth's biodiversity and ecosystems and their contribution to human societies in order to inform policy formulation. One of the more recent key elements of the IPBES conceptual framework (1) is the notion of nature's contributions to people (NCP), which builds on the ecosystem service concept popularized by the Millennium

Ecosystem Assessment (MA) (2). But as we detail below, NCP as defined and put into practice in IPBES differs from earlier work in several important ways. First, the NCP approach recognizes the central and pervasive role that culture plays in defining all links between people and nature. Second, use of NCP elevates, emphasizes, and operationalizes the role of indigenous and local knowledge in understanding nature's contribution to people.

The broad remit of IPBES requires it to engage a wide range of stakeholders, spanning from natural, social, humanistic, and engineering sciences to indigenous peoples and local communities in whose territories lie much of the world's biodiversity. Being an intergovernmental body, such inclusiveness

is essential not only for advancing knowledge but also for the political legitimacy of assessment findings (3).

FROM SERVICES TO CONTRIBUTIONS

NCP are all the contributions, both positive and negative, of living nature (diversity of organisms, ecosystems, and their associated ecological and evolutionary processes) to people's quality of life (4). Beneficial contributions include, for example, food provision, water purification, and artistic inspiration, whereas detrimental contributions include disease transmission and predation that damage people or their assets. Many NCP may be perceived as benefits or detriments depending on the cultural, socioeconomic,

A spatial overview of the global importance of Indigenous lands for conservation

Stephen T. Garnett^{1*}, Neil D. Burgess^{2,3}, John E. Fa^{4,5}, Álvaro Fernández-Llamazares⁶, Zolt Molnár⁷, Cathy J. Robinson^{8,9}, James E. M. Watson^{10,11}, Kerstin K. Zander⁸, Beau Austin¹, Eduardo S. Brondizio¹², Neil French Collier¹, Tom Duncan¹, Erle Ellis¹³, Hayley Geyle¹, Micha V. Jackson¹⁴, Harry Jonas¹⁵, Pernilla Malmer¹⁶, Ben McGowan¹, Amphone Sivongxay¹ and Ian Leiper¹

Understanding the scale, location and nature conservation values of the lands over which Indigenous Peoples exercise traditional rights is central to implementation of several global conservation and climate agreements. However, spatial information on Indigenous lands has never been aggregated globally. Here, using publicly available geospatial resources, we show that Indigenous Peoples manage or have tenure rights over at least ~38 million km² in 87 countries or politically distinct areas on all inhabited continents. This represents over a quarter of the world's land surface, and intersects about 40% of all terrestrial protected areas and ecologically intact landscapes (for example, boreal and tropical primary forests, savannas and marshes). Our results add to growing evidence that recognizing Indigenous Peoples' rights to land, benefit sharing and institutions is essential to meeting local and global conservation goals. The geospatial analysis presented here indicates that collaborative partnerships involving conservation practitioners, Indigenous Peoples and governments would yield significant benefits for conservation of ecologically valuable landscapes, ecosystems and genes for future generations.

There are at least 370 million people who define themselves as Indigenous¹, are descended from populations who inhabited

Increasingly sophisticated spatial tools are being developed to determine national responsibilities towards global environmental



INFORMING DECISION-MAKING WITH INDIGENOUS AND LOCAL KNOWLEDGE AND SCIENCE

Review

Journal of Applied Ecology



Working with Indigenous and local knowledge (ILK) in large-scale ecological assessments: Reviewing the experience of the IPBES Global Assessment

Pamela McElwee¹ | Álvaro Fernández-Llamazares² | Yildiz Aumeeruddy-Thomas³ |
Dániel Babai⁴ | Peter Bates⁵ | Kathleen Galvin⁶ | Maximilien Guèze⁷ | Jianguo Liu⁸ |
Zsolt Molnár⁹ | Hien T. Ngo¹⁰ | Victoria Reyes-García^{11,12} | Rinku Roy Chowdhury¹³ |
Aibek Samakov¹⁴ | Uttam Babu Shrestha¹⁵ | Sandra Díaz¹⁶ | Eduardo S. Brondízio¹⁷

¹Department of Human Ecology, Rutgers University, New Brunswick, NJ, USA; ²Helsinki Institute of Sustainability Science (HELSUS), Faculty of Biological and Environmental Sciences, University of Helsinki, Helsinki, Finland; ³Center for Functional and Evolutionary Ecology, Biocultural Interactions Team, UMR 5175, University of Montpellier, CNRS, UPV, IRD, EPHE, Montpellier, France; ⁴Institute of Ethnology, Research Centre for the Humanities, Hungarian Academy of Sciences, Budapest, Hungary; ⁵IPBES Technical Support Unit for Indigenous and Local Knowledge, Section for Small Islands and Indigenous Knowledge, UNESCO, Paris, France; ⁶Department of Anthropology and Geography, Colorado State University, Fort Collins, CO, USA; ⁷United Nations Environment Programme-World Conservation Monitoring Centre, Cambridge, UK; ⁸Center for Systems Integration and Sustainability, Department of Fisheries and Wildlife, Michigan State University, East Lansing, MI, USA; ⁹Centre for Ecological Research, Hungarian Academy of Sciences, Vácrátót, Hungary; ¹⁰Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES), IPBES Secretariat, Bonn, Germany; ¹¹Institució Catalana de Recerca i Estudis Avançats (ICREA), Barcelona, Spain; ¹²Institut de Ciència i Tecnologia Ambientals, Universitat Autònoma de Barcelona (ICTA-UAB), Barcelona, Spain; ¹³Graduate School of Geography, Clark University, Worcester, MA, USA; ¹⁴Aigine Cultural Research Center, Bishkek, Kyrgyz Republic; ¹⁵Global Institute for Interdisciplinary Studies, Kathmandu, Nepal; ¹⁶Instituto Multidisciplinario de Biología Vegetal (IMBIV) and Facultad de Ciencias Exactas, Físicas y Naturales, Universidad Nacional de Córdoba, Córdoba, Argentina and ¹⁷Department of Anthropology, Indiana University, Bloomington, IN, USA



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Current Opinion in
Environmental
Sustainability



Working with Indigenous, local and scientific knowledge in assessments of nature and nature's linkages with people

Rosemary Hill¹, Çiğdem Adem², Wilfred V Alangui³,
Zsolt Molnár⁴, Yildiz Aumeeruddy-Thomas⁵, Peter Bridgewater⁶,
Maria Tengö⁷, Randy Thaman⁸, Constant Y Adou Yao⁹,
Fikret Berkes¹⁰, Joji Carino¹¹, Manuela Carneiro da Cunha¹²,
Mariteuw C Diaw¹³, Sandra Díaz¹⁴, Viviana E Figueroa¹⁵,
Judy Fisher¹⁶, Preston Hardison¹⁷, Kaoru Ichikawa¹⁸,
Peris Kariuki¹⁹, Madhav Karki²⁰, Phil OB Lyver²¹,
Pernilla Malmer²², Onel Masardule²³, Alfred A Oteng Yeboah²⁴,
Diego Pacheco²⁵, Tamar Pataridze²⁶, Edgar Perez²⁷,
Michèle-Marie Roue²⁸, Hassan Roba²⁹, Jennifer Rubis³⁰,
Osamu Saito³¹ and Dayuan Xue³²

Working with indigenous and local knowledge (ILK) is vital for inclusive assessments of nature and nature's linkages with people. Indigenous peoples' concepts about what constitutes sustainability, for example, differ markedly from dominant sustainability discourses. The Intergovernmental Platform on Biodiversity and Ecosystems Services (IPBES) is promoting dialogue across different knowledge systems globally. In 2017, member states of IPBES adopted an ILK Approach including: procedures for assessments of nature and nature's linkages with people; a participatory mechanism; and institutional arrangements for including indigenous peoples and local communities. We present this Approach and analyse how it supports ILK in IPBES assessments through: respecting rights; supporting care and mutuality; strengthening communities and their knowledge systems; and supporting knowledge exchange. Customary institutions that ensure the integrity of ILK, effective empowering dialogues, and shared governance are among critical capacities that enable inclusion of diverse conceptualizations of sustainability in assessments.

- ¹⁵ Indigenous Women's Network on Biodiversity
- ¹⁶ Fisher Research and Institute of Agriculture and Public Policy Institute, University of Western Australia, Perth, Australia
- ¹⁷ Tulalip Tribes of Washington
- ¹⁸ Institute of Policy Research, Kumamoto City, Japan
- ¹⁹ KENRIK Section National Museums of Kenya, Nairobi, Kenya
- ²⁰ Centre for Green Economy Development, Nepal
- ²¹ Manaaki Whenua Landcare Research, PO Box 69040, Lincoln 7640, New Zealand
- ²² SvedBio at Stockholm Resilience Centre, Stockholm University, Stockholm, Sweden
- ²³ Foundation for the Promotion of Indigenous Knowledge
- ²⁴ University of Ghana, Department Plant & Environmental Biology, Legon, Ghana
- ²⁵ Cordillera Foundation, La Paz, Bolivia
- ²⁶ Independent expert, Georgia
- ²⁷ Fundación para el Desarrollo Rural Junej T'inam, Guatemala
- ²⁸ Centre National de la Recherche Scientifique, MHNH, Paris, France
- ²⁹ The Christensen Fund, 487 Bryant St. 2nd floor, San Francisco, CA 94107, United States
- ³⁰ Green Climate Fund, Incheon 22004, Republic of Korea
- ³¹ United Nations University Institute for the Advanced Study of Sustainability, Tokyo, Japan
- ³² School of Life and Environmental Science, Minzu University of China

Opinion

Inviting ecologists to delve deeper into traditional ecological knowledge

Zs. Molnár^{1,*} and D. Babai²

Ecologists and conservationists increasingly use traditional ecological knowledge (TEK) is vital for a better understanding of biodiversity; for example, for a more complex understanding of long-term processes, ecosystem resilience, the management practices, and the worldviews underpinning a deeper understanding of the ecological dimensions. Conservation biologists should conduct participatory research on TEK. To conduct TEK research properly, we need to familiarize ourselves more deeply with the methods and further develop their links with social scientists, such as strengthening respect towards other knowledge systems, inclusive in research and open to new types of value.

Research of traditional ecological knowledge

TEK (see [Glossary](#)) is increasingly respected and used in ecological research [1–3] and in assessments of biodiversity and ecosystems.

Trends in Ecology & Evolution

Series: Local and Indigenous ecological knowledge

Science & Society

Towards richer knowledge partnerships between ecology and ethnoecology

Zsolt Molnár,^{1,*}
Yildiz Aumeeruddy-Thomas,²
Dániel Babai,³ Sandra Díaz,^{4,5}
Stephen T. Garnett,⁶
Rosemary Hill,⁷ Peter Bates,⁸
Eduardo S. Brondízio,^{9,10}
Joji Cariño,¹¹ László Demeter,¹
Álvaro Fernández-Llamazares,^{12,13}
Maximilien Guèze,¹⁴
Pamela McElwee,¹⁵
Kinga Öllerer,^{1,16} Andy Purvis,^{17,18}

with, care for, and manage nature and its contributions to people (NCPs) [1–3]. Ecosystems managed, used, and/or owned by IP&LCs, although under increasing pressure from the expansion of industrial and extractive frontiers, are less degraded and their biodiversity is declining less rapidly than ecosystems under other management systems [4].

Beyond biophysical factors and lower densities of human populations and infrastructure, the main reason for high biodiversity in areas inhabited by IP&LCs is that their culturally based practices contribute to their well-being and sustain nature. These practices, based on long-term, in-depth, and dynamic ethnoecological knowledge, directly

we face today highlights the need for new partnerships to address critical social–ecological needs. In this paper, we advocate for the co-production of knowledge through just and equitable partnerships as a way to generate richer and fairer understanding of how nature functions, and how to steward it in a rapidly changing world.

IP&LCs contributions to biodiversity management and the underpinning ethnoecological knowledge

Existing research highlights the benefits from ecological–ethnoecological knowledge partnerships in three different contexts, as follows.



SPECIALITIES OF OUR REGION (Eastern EU member states)

- Between East and West
- Post-socialist countries
- Not having a world language
- Weak NGOs
- Weak inter-country collaborations
- Weak participation in most global fora
- IP&LCs are poorly recognized
- Biodiversity rich cultural landscapes with still many traditional land-use practices that are well studied



Local IPLC – conservationists/scientists follow-up formal meetings in Hungary/Ukraine in 2016



Kunadacs, March 8, 2016



Hódmezővásárhely, March 10, 2016



Nagybereg, May 19, 2016 (Ukraine)



Hajdúböszörmény, May 9, 2016



Visits of world-leading scientists to traditional knowledge holders (e.g. Sandra Díaz, Rosemary Hill)



IP&LCs in our region: mostly traditional knowledge holders (herders, farmers etc.)

- Strong inner-colonization by the urban population, decision makers etc.
- Poor networking between local traditional communities
- Social injustices inflicted on traditional knowledge holders both by EU, national governments, even NGOs

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Social justice for traditional knowledge holders will help conserve Europe's nature

Zsolt Molnár^{a,*}, Álvaro Fernández-Llamazares^{b,c}, Christoph Schunko^d, Irene Teixidor-Toneu^{e,f}, Ivan Jarić^{g,h}, Isabel Díaz-Reviriegoⁱ, Cosmin Ivascu^{j,k}, Dániel Babai^l, László Sáfián^m, Pål Karlsenⁿ, Huxuan Dai^o, Rosemary Hill^p

Kenya



**Visiting landscapes with vegetation
relevant to understand our region**

Mongolia



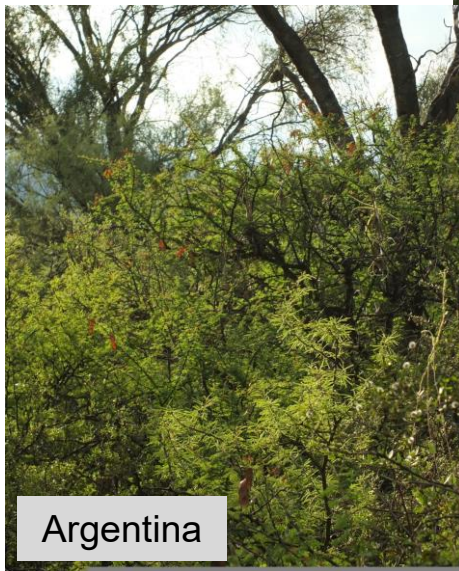
Russia



Iran



Argentina

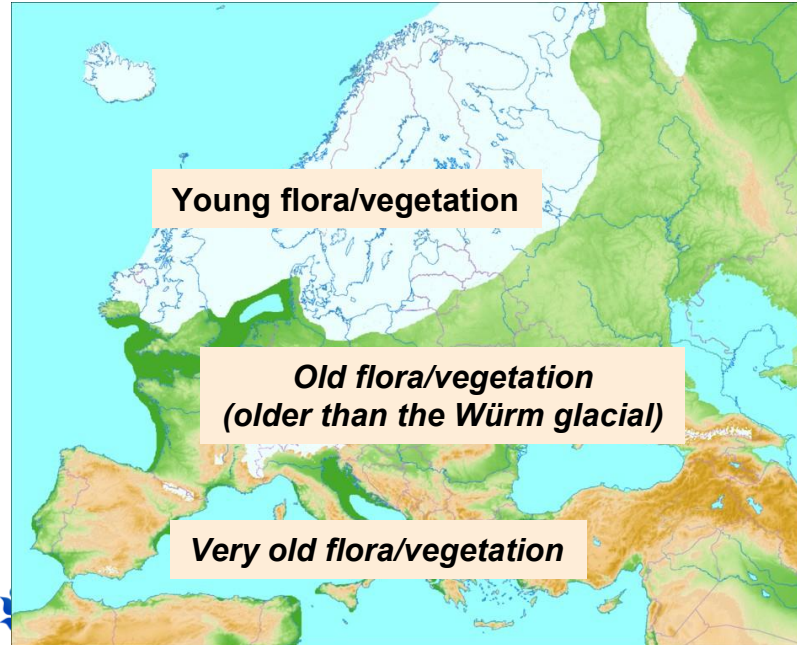


Texas



Is there a massive glacial–Holocene flora continuity in Central Europe?

Ábel Péter Molnár^{1,2}, László Demeter³, Marianna Biró³, Milan Chytrý⁴, Sándor Bartha³, Batdelger Gantuya^{5,6} and Zsolt Molnár^{3,*} 



My grandchildren' future?

