## GEO BON OPEN SCIENCE CONFERENCE & ALL HANDS MEETING 2020

06–10 July 2020, 100 % VIRTUAL

GEO BON is funded by the EU and also in cooperation with the Helmholtz Centre for Environmental Research – UFZ. iDiv is a research centre of the DFG.

For more information, visit [https://conf2020.geobon.org](https://conf2020.geobon.org)

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### Schedule

**Programme day 1: 06 July**

#### 08:00 - 08:15

**Opening Session**

Lina M. Estupinan-Suarez: Assessing Ecosystem Functional Types and monitoring social-ecological systems.

**Session 1: Ecosystem Functional Diversity – linking traits, communities and functioning and dynamics**

Jaime Burbano Girón: Measuring the integrity of Ecosystems with habitat suitability modelling for benthic communities and benthic monitoring.

Bruno Smets: Using near-term ecological forecasting to reduce extinction risk.

Laura Poggio: Integrating ecosystem services and biodiversity monitoring.

Daniel W. Kissling: Developing remotely sensed biodiversity metrics to generalize and monitor social-ecological systems.

Jessica Alcaraz-Segura: Incorporating ecosystem services into species distribution modeling.

Andrew Cavender-Bares: Ecosystem Service Values by habitat suitability applied to Juniperus communis.

Orkidea Arenas-Castro: Using coarse-grained data quality assessment to improve deposition and retrieval of LIDAR data.

Emmanuel Olaniyi: Developing remotely sensed vegetation community and species composition in the Kafue Ecosystem and National Forest Reserve, Zambia.

#### 08:15 - 09:15

**Coffee break**

#### 09:15 - 10:15

**Session 4: Developing remotely sensed biodiversity metrics to monitor and generalize social-ecological systems (remote sensing)**

Pedro J. Leitão: Incorporating ecosystem services into species distribution modeling.

Sarah Lorena: Essential Biodiversity Variable.” Using near-term ecological forecasting to reduce extinction risk.

Robert Ekblom: Developing remotely sensed biodiversity metrics to monitor and generalize social-ecological systems.

Brenda Briones: Developing remotely sensed biodiversity metrics to monitor and generalize social-ecological systems.

#### 10:15 - 11:15

**Session 5: Measuring the integrity of Ecosystems (remote sensing)**

Lingling Liu: Evaluating the use of underwater photogrammetry, remote sensing and mapping data for the socio-economic assessment of a population.

Maria Teresa Kavanaugh: Evaluating the use of underwater photogrammetry, remote sensing and mapping data for the socio-economic assessment of a population.

Patrick A. Jantz: Developing remotely sensed biodiversity metrics to monitor and generalize social-ecological systems.

Vladimir Curé: Incorporating ecosystem services into species distribution modeling.

#### 11:15 - 12:15

**Lunch break**

#### 12:15 - 13:00

**General discussion / Questions & discussion**

#### 13:00 - 14:00

**Session 6: Remote sensing and activities**

Ruth Oliver: Developing remotely sensed biodiversity metrics to monitor and generalize social-ecological systems.

Barbara Stigter: Developing remotely sensed biodiversity metrics to monitor and generalize social-ecological systems.

Yehezkel Buba: Developing remotely sensed biodiversity metrics to monitor and generalize social-ecological systems.

Francine Kershaw: Developing remotely sensed biodiversity metrics to monitor and generalize social-ecological systems.

Anton P. Van de Putte: Developing remotely sensed biodiversity metrics to monitor and generalize social-ecological systems.

#### 14:00 - 15:00

**General discussion / Questions & discussion**

#### 15:00 - 16:00

**Panel discussion: **

A New Map of World Terrestrial Ecosystems: Bridging Earth science and policy needs

**Panelists: **

Mike Gill 14:00-15:30

Hervé Perriot

Mike Gill

**Further discussion**

#### 16:00 - 17:00

**Side events**

#### 17:00 - 18:00

**Box event Sessions**

**Session 1: Assessing Ecosystem Functional Types**

**Session 2: Measuring the integrity of Ecosystems with habitat suitability modelling for benthic communities and benthic monitoring.

Session 3: Incorporating ecosystem services into species distribution modeling.

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**Panel discussion: **

**Panelists: **

Mike Gill 14:00-15:30

Hervé Perriot

Mike Gill

**Further discussion**

#### 18:00 - 19:00

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**Panel discussion: **

**Panelists: **

Mike Gill 14:00-15:30

Hervé Perriot

Mike Gill

**Further discussion**

#### 19:00 - 21:00

**Box event Sessions**

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**Panel discussion: **

**Panelists: **

Mike Gill 14:00-15:30

Hervé Perriot

Mike Gill

**Further discussion**

#### 21:00 - 22:00

**Box event Sessions**

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**Panel discussion: **

**Panelists: **

Mike Gill 14:00-15:30

Hervé Perriot

Mike Gill

**Further discussion**

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### Event returns

* David Cooper
  * Anne Letzgus
  * (EEOB, Science and Evidence for Biodiversity Policy and Action)

* Hervé Perriot
  * Mike Gill

* Scott Loarie

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* [https://conf2020.geobon.org](https://conf2020.geobon.org)
Ahmed, Kaleem: Herpetofauna assemblage in two Watershed areas of Kumaon-Himalayas, Uttarakhand, India

Alvarez-Vanhard, Emilien Gence: UAV and satellite data synergies for biodiversity monitoring: a review

Amini Tehrani, Nasrin: Spatial predictions of Species Distribution Essential Biodiversity Variables (SDEBV): A bird perspective in the Swiss Alps

Bates, Naomi: Bioacoustics and Machine Learning for Avian Species Presence Surveys

Blyth, Colette: Drinking at the last chance saloon – conservation genomic strategies for an endangered plant species

Casas, Enrique: Two step approach ecological niche model of invasive algae: Aparagopsis armata case of study in Acores archipelago

Castruita Esparza, Luis Ubaldo: How is Picea Chihuahuana Martinez facing the climate change and the increase of CO2 in the atmosphere?

Castruita Esparza, Luis Ubaldo: Potential areas with attributes of high conservation value in the Guachochi region, Chihuahua, Mexico

Cord, Anna: Modelling the impact of agricultural policies on biodiversity and ecosystem services

Darvishzadeh, Roshanak: Generation of Net Primary Productivity as Remote Sensing enabled biodiversity product in the myVARIABLE pilot of e-shape

DaSilva, Douglas Fernandes: Impact of Drought and Desertification on the Livelihood and Health of the Wayuu Indigenous People of La Guajira, Colombia

Elisa Montefiori: Gap analysis of the Arctic protected area network to represent Tundra’s functional heterogeneity

Gao, Xin: Fish diversity and resources in the Yangtze River

Khanina, Larisa G.: Effects of windthrow disturbances in Quercus mesic deciduous forests (European part of Russia)

Kumagai, Joy Alice Megumi: The “Effort Gap” Metric: Assessing Countries’ Uneven Conservation Effort Towards Habitats and Biodiversity Protection

Liu, Xiaojuan: The combined effect of global climate and land use change on biodiversity under Shared Socioeconomic Pathways

Mendonca, Maria Laura: Land-use changes negatively affect soil fauna communities: preliminary results of a meta-analysis

Napoliwoundka-Krzestukt, Agnieszka: Phytoplankton biodiversity in the context of ecological and trophic states of the lakes

Niamir, Aidin: The fraction of land cover classes; derived variables from ESA Land Cover time-series (1992-2018)

Nikolaeva, Anna: Ryazan Region is a model territory for monitoring changes in the entomocomplexes of Central Russia

Nolaimani, Nithiyaa: Survey on the diversity of benthic macrofauna in seagrass bed, Middle Bank, Penang, Straits of Malacca

Nogueira, Luís Eduardo Guerra Domingos: tba

Parmalee, Lark Jane: Beyond common biodiversity indices: a comparison of photo quadrat and in situ methods in rocky intertidal habitats in the Gulf of Maine

Rahman, S. M. Mustafizur: Fisheries diversity and environmental variables in the waterways of the eastern Sundarbans mangrove forest, Bangladesh

Richards, Corrin: Using species traits to quantify seabird bycatch vulnerability and predict conservation gains

Rochette, Anne-Julie: Assessing ecosystem services in African Biosphere Reserves: A review and user-informed classification of existing tools

Schrodt, Franziska: Essential geodiversity variables to complement EBVs

Stückemann, Kim-Jane: Mapping Costa Rica’s farm-natural vegetation using multisensor temporal-metric


Tassone, Morgan: Drivers of Spatial and Temporal Variability in Ecosystem Diversity on the Yamal Peninsula, Siberia, Russia

Zvyagina, Elena: Macrofungi of the Vakh river basin. The first data
**All Hands Meetings**

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<th>Time</th>
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<td>08:00-10:00</td>
<td>Monitoring Ecosystem Services: From local to global</td>
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<td>12:00-14:00</td>
<td>Conservation genetics networks and policy</td>
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<td>Ecosystem Structure EBV Working Group All Hands</td>
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**Coffee break**

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**Panel discussion**

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<td>10:00-10:30</td>
<td>David Obura</td>
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<td>10:30-10:50</td>
<td>Aletta Bonn</td>
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<td>10:50-11:10</td>
<td>Haigen Xu</td>
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<td>11:10-11:30</td>
<td>Maria Cecilia Londoño</td>
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<td>Tom Christensen</td>
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**Discussion**

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**Plenary wrap-up: OSC3 & OSC4**

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**All Hands Meetings cont.**

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**Project Meetings**

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**Project Meetings cont.**

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**Night**

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**Mixer**

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Please note that the schedule above is for programming day 3 of the GEO BON Open Science Conference & All Hands Meeting 2020, held from 06-10 July 2020, 100% virtual. The schedule includes sessions on monitoring ecosystem services, conservation genetics networks and policy, ecosystem structure EBV working group all hands meetings, and various project meetings. The event also includes a mixer session and a plenary wrap-up discussion. Detailed times and sessions are provided in the schedule.
### All Hands Meetings

#### Mixer

**FWBON Session 1**  
Introduction to FWBON. 
The past, the present, the people

**FWBON Session 2 Activities**  
1) What we are doing now  
2) What we planning to do  
3) New ideas

**BON Development Session 1**  
Chaired by Petteri Vihervaara

**Poster Session 2**

#### Keynote – EBV & EESV Development

**Melodie Mc Geoch**  
What monitoring invasive species has taught us about governing biodiversity knowledge

**Carlo Rondinini**  
The InSiGHTS framework for modelling species’ Area of Habitat

**Discussion**

**IC Meeting**

### All Hands Meetings cont.

#### MBON / FWBON joint session 4 workshop

**Darwin Core + OBIS & Case studies:**
- 16:00-16:05 - Opening of the session
- 16:05-16:25 - More than the sum of its parts: The rationale for using Darwin Core to integrate biological observations. Abby Benson, U.S. Geological Survey, Denver, CO, United States. (15 minutes talk + 5 minutes QA)
- 16:25-16:40 - Introduction to the Ocean Biodiversity Information System (OBIS). Ward Appeltans, Intergovernmental Oceanographic Commission (IOC) of UNESCO, Ocean Biodiversity Information System (OBIS) (10 minutes talk + 5 minutes QA)
- 16:40-16:55 - Building products and applications on OBIS. Pieter Provoost, Intergovernmental Oceanographic Commission (IOC) of UNESCO, Ocean Biodiversity Information System (OBIS) (10 minutes talk + 5 minutes QA)
- 17:10-17:15 - Discussion

#### Coffee break

**FWBON Session 4**  
Connecting people and activities for the next two years

**BON Development Session 2**  
Co-chaired by Maria Cecilia Londoño & Mike Gill

**Microsoft AI for Earth Presentation**

**Mixer**
**All Hands Meetings**

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**EBV-Data Workshop I:**
Developing standards and an infrastructure for the Essential Biodiversity Variables
Chair: Néstor Fernández

**Coffee break**

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**Closing – Wrap-up by all WGs / BONs / TFs**

**Closing Remarks**

**All Hands Meetings cont.**

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**EBV-Data Workshop II:**
Addressing gaps in mobilizing in-situ monitoring data
Chair: Robert Guralnick

**Policy Support AH Meeting:**
EBVs, EESVs and BONs in support of Policies post-2020:
Meeting of the GEO BON Policy Task Force.
Chairs: Laetitia Navarro & Cornelia Krug

**Coffee break**