

GEO BON Workshop Report

2 - 4th March, 2015, Leipzig, Germany

Towards a global system for assessing, monitoring and reporting on biological invasions

Invasive alien species of animals and plants cost the taxpayer billions each year. These species are second only to habitat transformation in documented severity of impacts on biodiversity. Species movements beyond their historic distributions will continue, driven largely by increased volumes of trade and increasingly complex trade routes.

There is currently no system in place for the systematic evaluation and monitoring of invasive alien species. To improve knowledge and information in this field, Melodie McGeoch (Monash University, Australia) and Piero Genovesi (IUCN Invasive Species Specialist Group) organised a workshop in close collaboration with GEO BON and iDiv. The workshop took place from 2nd to 4th March 2015 in Leipzig, Germany.

22 scientists and representatives from 14 countries came together with international policy experts Dr Myriam DuMortier from the European Commission, Dr Craig Hilton-Taylor from the IUCN SSC Red List Unit, Dr Nick Holmes from Island Conservation, Dr Sean Murphy from CABI, Dr Jon Paul Rodriguez IUCN SSC and Dr Junko Shimura from the Convention of Biological Diversity.

The workshop had three main aims: First, to identify and agree on a minimum set of *Essential Biodiversity Variables* to form the basis of a global observation system for biological invasions. Second, to develop guidelines for national schemes to support impact classification and Aichi Target 9 of the Strategic Plan for Biodiversity (2011-2020). Third, to progress implementation of the IUCN alien impact classification scheme.

During the workshop, the experts worked out a first set of variables to define a minimum information set to capture the major dimensions of biological invasion as a driver of biodiversity change. There was a strong focus not only on the spread and impacts of alien invasive species but also on monitoring the pathways of invasion. The outcomes from this meeting will support not only national governments but also the Convention of Biological Diversity (CBD) and the regional assessments of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES).

This workshop is part of the GEO BON and Monash University funded project *Black Listing Invasive Species for Monitoring and Reporting*.



Participants (from left to right): Miguel Fernandez, Guillaume Latombe, Marten Winter, John Wilson, Jan Pergl, Donald Hobern, Petr Pyšek, Jonathan Jeschke, Melodie McGeoch, Tim Blackburn, Sabrina Kumschick, Sven Bacher, Riccardo Scalera, Piero Genovesi, Junko Shimura, César Capinha, Helen Roy, Cang Hui.

Participants

Project participants

Name	Organisation
Dr Sven Bacher	University of Fribourg, Switzerland
Prof. Tim Blackburn	Zoological Society of London, London
Dr César Capinha	University of Lisbon, Portugal
Assoc. Prof. Mark Costello	University of Auckland, New Zealand
Dr Miguel Fernandez	Centre for Integrative Biodiversity Research (iDiv), Germany
Dr Piero Genovesi	IUCN ISSG and Institute for Environmental Protection and Research, Italy
Dr Richard Gregory	RSPB Centre for Conservation Science, United Kingdom
Dr Donald Hobern	Global Biodiversity Information Facility, Denmark
Prof. Cang Hui	Stellenbosch University, South Africa
Prof. Dr Jonathan Jeschke	IGB, Germany
Dr Walter Jetz	Yale University, USA
Dr Sabrina Kumschick	Stellenbosch University, South Africa
Dr Guillaume Latombe	Monash University, Australia
Assoc. Prof. Melodie McGeoch	Monash University, Australia
Dr Jan Pergl	Academy of Sciences, Czech Republic
Dr Petr Pyšek	Academy of Sciences, Czech Republic
Dr Helen Roy	Centre for Ecology and Hydrology, United Kingdom
Dr Riccardo Scalera	IUCN SSC ISSG, Italy
Dr John Wilson	Stellenbosch University, South Africa
Dr Marten Winter	Centre for Integrative Biodiversity Research (iDiv), Germany

Stakeholders and GEO BON participants

Name	Organisation
Dr Myriam DuMortier	European Commission, Belgium
Dr Jörg Freyhof	Centre for Integrative Biodiversity Research (iDiv), Germany
Dr Craig Hilton-Taylor	IUCN SSC Red List Unit, United Kingdom
Dr Nick Holmes	Island Conservation, USA
Dr Sean Murphy	CABI, United Kingdom
Prof. Henrique Pereira	Centre for Integrative Biodiversity Research (iDiv), Germany
Dr Jon Paul Rodriguez	IUCN SSC, Venezuela
Dr Junko Shimura	CBD, Canada

Programme Overview

Session 1: Essential Biodiversity Variables (EBVs) and Invasion Monitoring

Session 2: EBVs for Invasion Monitoring: Guidelines for implementation

Session 3: Stakeholder Meeting: Development of an IUCN Black Listing Process

Programme

Monday 2nd		
Venue: Biocity Rm, iDiv		
9h00-9h30	Welcome and background	Melodie McGeoch and GEO BON
SESSION 1	Goal: <i>To identify and develop Essential Biodiversity Variables for invasion monitoring in support of policy and assessment processes</i> Envisaged products from Session 1 and 2: <ol style="list-style-type: none"> GEO BON publication (see example) Journal publication 	CHAIR: Donald Hobern
9h30-10h00	Essential Biodiversity Variables: An introduction and the state of play	Henrique Pereira / Miguel Fernandez
10h00-10h30	Prioritisation for Invasion Management and the role of Black Listing	Piero Genovesi
10h30-11h00	Alien Species Impact Scheme: Update on current developments of methods	Tim Blackburn
11h00-11h30	<i>Tea break</i>	
11h30-12h00	Linking Invasive Species Information Systems and Mapping Tools with EBVs, monitoring and Black Listing	Donald Hobern
12h00-12h30	Discussion	All
12h30-13h30	<i>Lunch</i>	
13h30-14h00	EBVs for Invasion Monitoring: Outline of work programme	Melodie McGeoch
	<i>Venues for working groups: Biocity Rm and Resilience Rm</i>	
14h00-15h30	Working groups develop content for <i>Essential Biodiversity Variables for Invasion Monitoring</i>	All
15h30-16h00	Working group feedback and discussion	All
16h00-17h00	Outcomes and product delivery	All
Tuesday 3rd		
Venue: Biocity Rm, iDiv		
SESSION 2	Goals: <i>EBVs for invasion monitoring: Sampling and monitoring guidelines</i>	Chair: Cang Hui
9h00-9h30	EBVs for invasion monitoring: Synthesis of outcomes from Day 1	Guillaume Latombe
9h30-10h00	General discussion: Development of	All

	monitoring guidelines for countries based on EBVs	
	Venues for working groups: Biocity Rm and Resilience Rm	
10h00-11h00	Working groups to develop guidelines	All
11h00-11h30	Tea break	
11h30-12h30	Working groups to develop guidelines	All
12h30-13h30	Lunch	
13h30-14h00	Overview of potential synergies with the COST action ALIEN Challenge	Riccardo Scalera
14h00-14h30	Outline of working group tasks	Melodie McGeoch
14h30-16h30	Working groups: Case studies, infrastructure requirements, links back to policy and assessment processes	All
16h30-17h00	Planning the way forward, including discussion of case studies, guidelines, monitoring and Black Listing	All
19h00 -	Group Dinner Café Cantona http://www.cafecantona.com/ Windmühlenstraße 29, 04107, Leipzig, 0341 2254302, Booking: Ariane Korn (20 people)	All
Wednesday 4th	Venue: Biocity Rm, iDiv	
SESSION 3	Goals: Stakeholder Meeting: Development of an IUCN Black Listing process – challenges and opportunities	Chair: Piero Genovesi
9h00-9h30	Welcome and background	Piero Genovesi
9h30-10h00	Overview of outcomes from Black Listing Workshop (Sessions 1 and 2)	Melodie McGeoch
10h00-11h00	Round Table of Stakeholder perspectives	10 min introductions by each representative
11h00-11h30	Tea break	
11h30-12h00	Naming and defining a process for categorising and prioritising invasive species	All
12h00-13h00	General discussion on the adoption of an IUCN Black Listing process	All
13h00-14h00	Lunch	
14h00-14h30	The Black Listing Initiative: the Way Forward	All
	END OF STAKEHOLDER MEETING	
14h30-17h00	Wrap up of Sessions 1 and 2 as required	