

Capacity Enhancement Workshop: South-East Europe



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Data Use for Decision Making

Sarajevo, Bosnia and Herzegovina

Information Brochure v.1

December 4-6, 2019



1. Introduction

This workshop working in collaboration with [UNEP-WCMC's CONNECT](#) programme aims to demonstrate how mobilized primary biodiversity data can be integrated into national policy-making processes. Participants will be introduced to the importance of biodiversity data within the decision making process before learning how to clean data and running key analyses - determining the distribution of a species and assessing the conservation status of species. Participants will then learn how to communicate their results to key stakeholders in the decision making process.

The event will have **online and onsite components** and both will have a strong practical approach (including a significant component of group work). Participants will have the possibility to evaluate their learning and receive recognition of their level of understanding with a digital badge. The official language of the workshop will be English.

Only participants and mentors who have been selected by the GBIF Secretariat can subscribe to this workshop. Please address any questions you may have with respect to the course to Andrew Rodrigues arodrigues@gbif.org.

This brochure includes a **draft agenda** for the event. Time is expressed in UTC/GMT+2 (CAT).

Course Topics

Mainstreaming Biodiversity Data

- Receive a framework for the integration of biodiversity data within the decision making process and understand the importance of data within that framework
- Learn how to identify relevant policy entry points and key stakeholders
- Learn how to develop a communication strategy to influence key stakeholders in decision making process

Data Processing

- Learn how to process and format data to make it 'fit-for-purpose' with different data cleaning tools

Mapping Standards and Protocols

- Learn IUCN mapping standards for producing a species distribution map

Ecological Niche Modelling

- Introduction to running and interpreting a basic ecological model to determine the distribution of a species

Assessing the conservation status of a species

- Learn how to apply criterion B of the IUCN Red List Categories and Criteria using spatial data



Learning Outcomes

- Develop a biodiversity data mainstreaming strategy that considers the national context
- Identify policy entry points and categorize key stakeholders with respect to their relative influence
- Develop a communication strategy and convincing arguments for the integration of biodiversity into decision making processes
- Use different software tools for performing data cleaning
- Justify the correction and/or removal of data points
- Apply different species distribution mapping approaches
- Explain difference between fundamental and realized niches
- Explain how to delimit a training region
- Generate a simple niche model
- Explain niche model results
- Identify areas of uncertainty in projection
- Apply criterion B of the IUCN Categories and Criteria for the assessment of a species conservation status
- Generate key measures for the application of criterion B using spatial data

2. Prerequisites for the Workshop

To make best use of the activities around this workshop, the participants should possess the following skills and knowledge:

- have a university-level education in biodiversity informatics, ecology or conservation;
- have some understanding of computer-based geographical and statistical analysis tools e.g. GIS and R, and may have already run analyses using these tools;
- have an understanding of national and/or international biodiversity policy e.g. the Convention on Biological Diversity, Sustainable Development Goals, CITES etc;
- have a basic command of English;
- be able to disseminate the knowledge acquired during the workshop among the other relevant stakeholders.

Onsite Workshop Support

Trainers

Andrew Rodrigues	GBIF Secretariat, Copenhagen, Denmark	arodrigues@gbif.org
Hannah Owens	University of Copenhagen, Copenhagen, Denmark	hannah.owens@gmail.com
Andrea Baquero	UNEP-WCMC, Cambridge, United Kingdom	Andrea.Baquero@unep-wcmc.org

Mentors

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GIZ / ORF BDU

Azra Velagic - Hajrudinovic	Open Regional Fund for South- East Europe – Implementation of Biodiversity Agreements (ORF BDU)	azra.velagic- hajrudinovic@giz.de
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3. Pre- Workshop Activities:

Module P1: Introduction to the workshop and eLearning Platform

An introduction to the objectives of the workshop and to eLearning covering the principles of virtual learning and how to navigate the eLearning platform.

Module P2: Earth Observations

An introduction to the Earth Observations data covering earth-surveying and remote sensing techniques before focussing on biodiversity data and some of the issues regarding data quality to be considered.

Module P3: Biodiversity Data and Decision Making

An introduction to the key terms and concepts relating to the mainstreaming of biodiversity data into the decision making process and internationally recognised information products that are used to guide conservation action.

Module P4: Using GBIF-Mediated Data

An introduction on how to find and download data from www.gbif.org including explanations on potential interpretations to source data and best practice for citation of use of GBIF-mediated data.

Module P5: Organising Your Work

An introduction to the key principles of data and file management to ensure an efficient workflow from data access to data use.

4. Onsite Workshop

This draft schedule is provided to allow participants a sense of the contents planned for the event. It is likely that there will be changes before the final contents of the workshop are fixed.

Day 1
08:30 - Registration
09:00 - Welcome and introduction to the workshop <i>Introductions from the workshop hosts and a regional overview of how biodiversity data is being used in the decision-making process</i>
09:45 - Foundations of the course <ul style="list-style-type: none">• <i>What is GBIF-mediated data?</i>• <i>How can GBIF-mediated data be used for influencing policy?</i>• <i>Outline of workshop programme</i>
10:30 - Coffee/tea break
Module 1: MAINSTREAMING BIODIVERSITY DATA
10:45 - Data for decisions <i>Exploring how evidence can inform policy development and how understanding the context is important for working out a mainstreaming strategy, including identification and prioritisation of stakeholders</i>
11:15 - Exercise 1: Identifying mainstreaming components, policy entry points and stakeholders <i>Components of the mainstreaming process for integrating biodiversity information into decision making and a card-based activity to prioritize stakeholders</i>
12:30 - Lunch
Module 2: DATA CURATION, FORMATTING & TRANSFORMATION
13:30 – Why clean data? <i>Why do we need to clean the data we are going to use and the different approaches to doing it</i>
14:15 - Exercise 2: Cleaning a dataset for use <i>Basic data cleaning in Excel and QGIS</i>
15:00 - Coffee/tea break
Module 3: MAPPING STANDARDS AND PROTOCOLS
15:15 - Mapping standards for Red List assessments <i>Understand the basics of GIS</i>
15:45 - Exercise 3: Producing a species distribution map <i>How to draw a species distribution map with a limited number of data points that can feed into red listing processes.</i>
17:30 - End of the day

Day 2

Module 4: ECOLOGICAL NICHE MODELING

09:00 – Introduction to Ecological Niche Modeling

What is an ecological niche and what are the different approaches we can take for modelling a species' ecological niche.

09:30 - Exercise 4. Starting Wallace, loading occurrences

10:30 - Coffee/tea break

10:45 - Environmental data

Introduction to different environmental variables you use when modelling species ecological niches and the principles of how to define a training region for your model.

11:15 - Exercise 5. Training regions, loading and processing environmental variables

11:45 - Exercise 6. Partitioning Occurrence Data and Calibrating Niche Models

12:30 - Lunch

13:30 - Model interpretation

Interpreting the results of an ecological niche model

14:15 - Exercise 7 - Visualizing and Thresholding ecological niche models

15:00 - Coffee/tea break

15:15 - Ecological Niche Model Projections

Projecting a model into novel environments

16:00 - Exercise 7 - Projecting ecological niche models

17:00 - End of the day

Day 3

Module 5: ASSESSING THE CONSERVATION STATUS OF A SPECIES

09:00 - IUCN Red List criterion B

Introduction to the IUCN Red List Categories and Criteria with a more detailed perspective on how biodiversity data can be used for applying criterion B.

10:30 - Coffee/tea break

10:45 - Exercise 8 - Applying Criterion B

Using species distributions maps to calculate extent of occurrence and area of occupancy for applying criterion B of the IUCN Red List Categories and Criteria.

12:30 - Lunch

MODULE 6: STAKEHOLDER COMMUNICATION

13:30 - Developing a communication strategy

Developing a communication strategy to deliver key messages

14:15 - Exercise 9: Developing a communication plan

15:00 – Coffee/Tea Break

15:15 – Stakeholder communication

Learning how to pitch an idea to key stakeholders

15:30 - Exercise 10: Stakeholder communication

16:30 - Evaluation

During this session we will review the contents covered by the onsite workshop, and the participants will have the opportunity to provide feedback via an evaluation session. We will discuss the follow-up activities after the onsite workshop, in particular everything connected with the assessment of the participants and the certification process.

16:50 - Closing address