

# BOOK OF ABSTRACTS

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## I. SESSION DESCRIPTION

**ID: B2**

A review of the current state of the ecosystem services of wetlands in the Amazon region

**Format:** Hybrid

**Hosts**

	Name	Organisation	E-mail
Host	Diego Alexander Guarín Cifuentes	TU Dortmund and YESS	dialgucif@gmail.com

### Abstract

The Amazon region is one of the most biodiverse regions on the planet as a biome it is home to diverse ecosystems including dry land forests, mangroves, savannas, lotic water bodies, and wetlands, among others. Of the latter, there are several studies of biotic or cultural biodiversity, most of which are reflected in management plans, or gray and scientific literature. However, it would be interesting to know experiences where the current state of ecosystem services in several wetlands of the Amazon region is analyzed, for example, to know where the most studies have been carried out in the last 10 years, which ecosystem services have been the most analyzed, what challenges there are still in the valuation of services in some of these areas, and which consequences have several drivers of change in the future state of these ecosystems.

### Goals & Objectives

- Generate a space for the exchange of experiences, presenting studies related to ecosystem services in wetland areas.
- To disseminate studies on the valuation of ecosystem services that have had an impact on the community and at the local level by generating new knowledge and generating benefits for local communities.
- To disseminate studies or initiatives of ecosystem services analysis that may need some kind of technical, logistical, logistical, contact, or other support

### Planned Output

Session proceedings

### Session Format

Abstract presentations, around 15–20 minutes each

### Acceptance of voluntary contributions

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

### Relation to ESP Working Groups or National Networks

Biome Working Groups: BWG 2 – Freshwater systems.

## II. SESSION PROGRAMME

**Date of session:** 07.11.2023

**Time of session:** 30 minutes

### Timetable speakers

Time	First name	Surname	Organization	Title of presentation
15–20 min slot between 11:00– 12:30 hrs	Shreya	Wadhwa	Technical University Dresden	The current situation of the Amazonian wetlands
15–10 min slot between 11:00– 12:30 hrs	Diego	Guarin	Technical University of Dortmund	A review of the current state of the ecosystem services of wetlands in the Amazon region

## III. ABSTRACTS

### 1. Abstract / Resumen

**B. Biome Working Group sessions / Sesiones del Grupo de trabajo sobre Biomas:** B2 – A review of the current state of the ecosystem services of wetlands in the Amazon region

The current situation of the Amazonian wetlands

*First author(s):* Shreya Wadhwa

*Presenting author:* Shreya Wadhwa

*Contact:* 1 shreya.wadhwa@gmail.com

The Amazon rainforest and basin are essential for the survival of the planet. They are home to a diverse range of species and provide crucial ecosystem services. The basin is located in the northern part of South America, comprising an area of 6.8 million square kilometres. Due to the high annual precipitation, around 30 per cent of the area comprises of different types of complex wetland systems. These include seasonal floodplains along large river systems, interfluvial wetlands, permanently flooded swamps, hydromorphic savannas, and coastal wetlands, including mangroves and tidal floodplains (Wittmann & Junk, 2016), which consist of various endemic species. The wetlands vary according to water and soil fertility, hydrology, vegetation cover, diversity of flora and fauna, and primary and secondary productivity (Junk et al., 2011).

However, the Amazonian wetlands are at risk because of human activity and its impact on the planet's surface and resources. The main threats to these wetlands include deforestation, river damming for hydropower, mining pollution, agriculture, aquacultural activities, domestic and industrial wastewater and ecosystem degradation (Wittmann & Junk, 2016), affecting about 20 per cent of the basin. Furthermore, these have led to the degradation of essential ecosystem services such as biodiversity maintenance, water quality, climate and flow regulation, nutrient and carbon cycling, and food and fibre production (Castello & Macedo, 2016).

Therefore, it is necessary for the Amazonian countries to recognise the importance of the wetlands and implement comparatively more effective policies that would benefit and enhance the ecosystem services it provides. Moreover, maintaining these wetland ecosystems requires rigorous research and policy frameworks (Castello & Macedo, 2016). This presentation and paper will address the current threats to Amazonian wetlands and discuss several necessary steps to be taken by countries to mitigate the problem.

*Keywords:* Amazon basin, wetlands, ecosystem services, threats, policies