Wetland Biodiversity
Why it matters

World Wetlands Day
2 February 2020
Wetlands and biodiversity
Biodiversity is:

the **variability among living organisms** from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species and of ecosystems.
Wetlands are:

Land areas saturated or flooded with water, permanently or seasonally

- **Inland wetlands**: marshes, peatlands, ponds, lakes, rivers, floodplains, swamps, fens
- **Coastal wetlands**: saltwater marshes, estuaries, mangroves, lagoons, coral reefs
- **Human-made wetlands**: fish ponds, rice paddies, reservoirs, saltpans

Wetlands are rich with biodiversity
Wetlands are rich reservoirs of biodiversity

- **40%** of the world’s plant and animal species live or breed in wetlands
- Over **100,000 freshwater species** have been identified in wetlands so far
- **Coastal wetlands**, especially, are among the most biologically diverse places
Life thrives in wetlands

• 30% of known fish species, with **200 new freshwater species** discovered **annually**
• Many at-risk **amphibians** and **reptiles**
• Migratory and resident **water birds**
• Thousands of **plant species**
• **Endemic species** – only found in a specific wetland
Why wetland biodiversity matters?

• Swamp vegetation filters pollutants, making water potable
• Wetlands provide livelihoods for one billion people and help feed the world
• Peatlands store 30% of land-based carbon
• Lakes and rivers supply food and medicine
• Mangroves and coral reefs protect coastal communities during storm surges, hurricanes and tsunamis
• Wetlands provide ecosystem services worth USD $47 trillion annually, more than those from forests, deserts or grasslands
Humans are destroying wetlands

- Wetlands are vanishing **three times faster** than forests
- **35%** have disappeared since the **1970s. 87%** have been lost since the **1700s**

**Causes of wetland loss:**

- Drainage and infilling for agriculture and construction
- Pollution
- Overexploitation of resources (e.g., overfishing)
- Invasive species
- Climate change
Biodiversity is in steep decline
Wetland species are declining most

• Between 1970 and 2014, populations of fish, birds, mammals, amphibians, and reptiles declined by 60%

• Since 1970, 81% of inland wetland species and 36% of coastal and marine species have declined

• 25% of wetland species are threatened with extinction, including water birds, freshwater-dependent mammals, marine turtles, and coral-reef-building species
This is an emergency

• **One million** animal and plant species are threatened with extinction

• **Species are declining** faster than at any time in human history and the pace is accelerating

• **Climate change** is making it worse

• Citizens, NGOs, and governments are working to **reverse the trends**. But we are not doing enough
End biodiversity loss

- Restore, conserve and promote wise use of all wetlands
  - Don’t drain
  - Don’t build over
  - Don’t degrade
- Assess the real value of wetlands

Wetlands are rich with biodiversity
World Wetlands Day: 2 February

Celebrated annually to raise global awareness about the **value of wetlands**

**Wetlands and Biodiversity**, theme 2020

**Get involved**

- **Organize an event** to raise awareness about the importance of wetlands biodiversity
  - Register and upload your event to worldwetlandsday.org

- **Visit** worldwetlandsday.org to download information materials to share and raise awareness

- **Learn about the types of wetlands** in your country
The Convention on Wetlands

Only **global treaty** to focus on a single ecosystem

- Adopted in Ramsar, Iran in 1971
- 171 Contracting Parties

Contracting Parties commit to:

- Designate wetlands of high value on the list of Wetlands of International Importance (Ramsar Sites)
- Use all wetlands wisely and cooperate on transboundary issues
- Number of Ramsar Sites: 2,300,
- Total surface of designated Sites: 249,579,562 million hectares (slightly larger than Mexico)
Sources


Facts about wetlands and biodiversity: Ramsar fact sheet, Reservoirs of Biodiversity, pp. 1 and 2 https://www.cbd.int/convention/articles/?a=cbd-02


Video, Wetlands Are Critical for Biodiversity, Ramsar, 9 May 2017, https://www.youtube.com/watch?v=CyuEbc3t2XI&list=PLhmlOkoIje7Mk4bus25eSIxXAxTPqXAYi&index=3


Information about the Convention on Wetlands https://www.ramsar.org/
Thank you.

www.worldwetlandsday.org