

Seven ways wetlands provide for our future

1 Wetlands ensure fresh water for all of us

Only 3% of the world's water is fresh, and most of that is frozen. Yet every human needs 20-50 litres of water a day for basic drinking, cooking and cleaning. Wetlands provide that water. They also help replenish groundwater aquifers.

2 Wetlands purify and filter harmful waste from water

Plants from wetlands can help absorb harmful fertilizers and pesticides, as well as heavy metals and toxins from industry.

The Nakivubo Swamp in Kampala, Uganda filters sewage and industrial effluents for free; a treatment plant would cost \$2 million per year.

3 Wetlands feed humanity

Rice, grown in wetland paddies, is the staple diet of nearly three billion people.

The average human consumes 19kg of fish each year. Most commercial fish breed and raise their young in coastal marshes and estuaries.

70% of all fresh water extracted globally is used for crop irrigation.

4 Wetlands are bursting with biodiversity

Wetlands are home to more than 100,000 known freshwater species alone, and that number is growing every year.

In just 10 years, 272 new species of freshwater fish were discovered in the Amazon.

Wetlands are essential to bird life, breeding and migration.

5 Wetlands act as nature's shock absorbers

Peatlands and wet grasslands in river basins act as natural sponges, absorbing rainfall, creating wide surface pools that ease flooding in rivers. The same storage capacity can also safeguard against drought.

6 Wetlands help fight climate change

Peatlands alone store more than twice as much carbon as all the forests in the world!

In the face of rising sea levels, coastal wetlands reduce the impact of typhoons and tsunamis. They also bind the shoreline and resist erosion.

7 Wetlands provide sustainable livelihoods and products

61.8 million people depend directly on fishing and fisheries for a living.

Timber for building, vegetable oil, medicinal plants, animal fodder, and stems and leaves for weaving can all originate from sustainably managed wetlands.





Facts and paradoxes affecting our future

Strange but true

- The pyramids of ancient Egypt arose thanks to wetlands; many early civilizations evolved as agriculture took root along the Nile, Tigris, Euphrates, Mekong and Yangtze.
- One single adult oyster can filter nearly 200 litres of water per day, removing sediments and chemical contaminants from coastal waters.
- A portion of the sewage from the Indian city of Kolkata (metropolitan population over 14 million) is treated effectively by the East Kolkata marshes, which also provide livelihoods to 20,000 people.
- Wetlands range in size from your local pond to the Pantanal in Brazil, Bolivia and Paraguay, which covers an area three times the size of Ireland.
- At least 64% of the world's wetlands have disappeared since 1900.
- Wetlands are not just found in low-lying areas. The world's highest mountain wetland is Panch Pokhri, a group of three sacred lakes in Nepal. The highest of these is 5,494 m above sea level.

Two sides to every story

The water hyacinth is the “Jekyll and Hyde” plant of the wetlands world.

In its native Amazon, it purifies the water and absorbs heavy metals. In Lake Victoria in East Africa, it purifies, but also becomes an invasive weed that spreads like wildfire. Under some conditions, the plant can double in volume in as little as five days.

Peatlands cover 3% of the world's land area, but they hold 30% of all carbon stored on land. This is twice the amount stored in forests globally. But when they are burned or drained for agriculture, they go

from being a carbon sink to a carbon source. CO₂ emissions from peat-land drainage, fires and exploitation equate to 10% of annual fossil fuel emissions.

Coastal wetlands are both a victim and a hero in the climate change drama.

Reefs, mangroves and saltmarshes are caught between the rising oceans and human development along coastlines. Yet at the same time, they bind the shoreline together, preventing erosion and slowing storm surges, and increasing resilience to climate change.

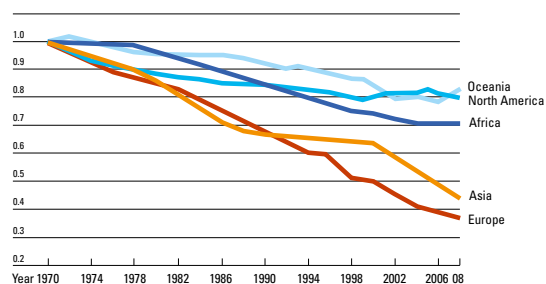




A future **without** wetlands?

It's a frightening possibility. Newly-published estimates show that 64% of the world's wetlands have disappeared since 1900. In some regions, notably Asia, the loss is even higher. This rapid decline means that access to fresh water is eroding for 1-2 billion people worldwide, while flood control, carbon storage and traditional wetland livelihoods all suffer. Biodiversity has also been affected. Populations of freshwater species have declined by 76% between 1970 and 2010 according to WWF's Living Planet Index.

Ramsar jointly sponsors the Wetlands Extent Index, another indicator of the loss in recent decades, which measures the decrease in a global sampling of more than 1000 wetland sites between 1970 and 2008. Overall, these sites shrank by an average of 40% over the period. Individual wetlands and regions vary widely, but the continuing trend is unmistakable.



What is driving this loss?

Unfortunately, wetlands are often viewed as wasteland; something to be drained, filled and converted to other purposes.

The main causes of wetlands loss and degradation are:

- Major changes in land use, especially an increase in agriculture and grazing
- Air and water pollution and excess nutrients
- Water diversion through dams, dikes and canalization





Safeguard our future: what you can do!

Wetlands provide a multitude of benefits, including filtering our water, ensuring biodiversity, protecting our coastlines, and mitigating climate change. Yet half of the world's wetlands have disappeared in the last century... So what can you actually do to help turn the tide?

Experience wetlands for yourself

Check the list of Ramsar Sites www.ramsar.org/sites-countries/the-ramsar-sites and see if there's a designated Wetland of International Importance in your area. Talk with the managers there about what kind of help they could use.

Educate others

Host an event to help others understand the benefits that wetlands bring, both globally and locally. Drop a some fun facts and paradoxes into the conversation.

Organize a wetlands clean-up

In populated areas, wetlands often attract rubbish. Together in a group, clean-up can be achieved in a few hours. Take pictures before and after to highlight the difference.

Take everyday decisions with the environment in mind

- Buy sustainably raised or caught seafood, organic produce and meat.
- Use reusable bags at the grocery store.
- Take shorter showers.
- Recycle household trash, and make sure that batteries and other harmful waste do not end up in landfills – or in wetlands!
- If you have a garden, select native plants and use organic fertilizer where possible.

Get involved in World Wetlands Day

Visit a wetlands site and enter Wetlands Youth Photo Contest. Make a pledge to take action.

Join with others to make a difference

Many organizations and networks already work for wetlands and their sustainable use. If you feel strongly about the issue, consult the Ramsar website for partners, and link up with their efforts.

