Convention on Wetlands

Keep Peatlands wet for a better future

Peatlands cover only 3% of the Earth's land surface, but store more carbon than all the world's forests combined – if they are kept wet.

Peatlands occur in a great variety of forms and are present in more than half of all Ramsar sites throughout the world.

Unwise use of this key wetland type may damage the features that make peatlands so important for long-term carbon storage.

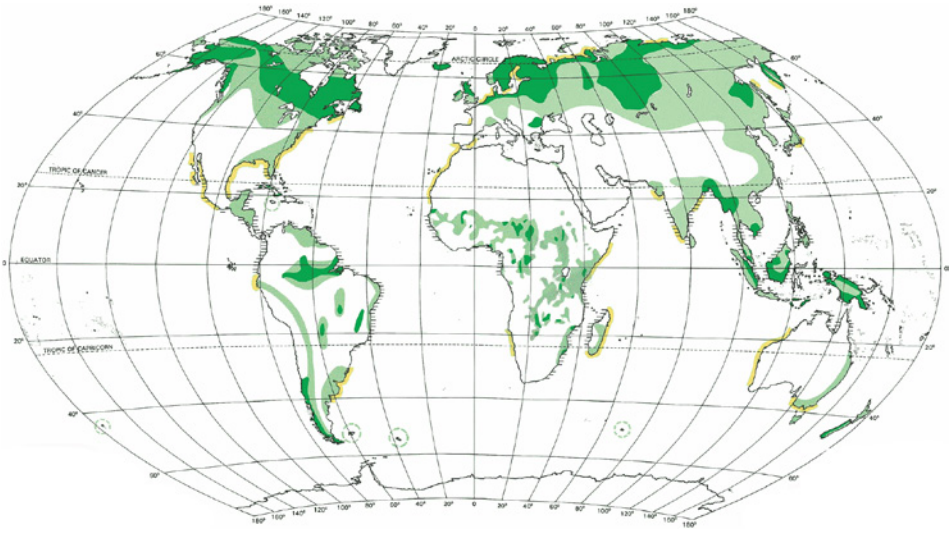
Drainage of peatlands also leads to loss of carbon and fertile soil, including severe soil subsidence and salt water intrusion in lowland coastal areas.

Peatlands

Pristine peatlands are characterized by the presence of water and special vegetation. The peat soil, often exceeding many meters in depth, consists of organic material and water and is created by the accumulation of partially decomposed plant materials. The layers of peat build up over sometimes thousands of years and preserve other materials including pollen grains, human artefacts and ancient bodies, giving us an unrivalled window into the past.

Global carbon store and climate mitigation

It has been estimated that peatlands contain at least 550 Gt of carbon, which is almost double the amount stored in the world's forests. However, when peatlands are drained huge amounts of carbon dioxide (CO_2) are released making restoration of great importance for climate change mitigation.



Almost every nation on earth has peatlands. The map highlights areas with significant tracts of peatland habitats.

Adapted from Lappalainen 1996, with kind permission from IPS

www.ramsar.org

Peatland restoration involves re-wetting and restoring former hydrology, creating conditions where the remaining peat soil is protected and peat forming processes are resumed.

Healthy peatlands provide benefits for all of us

Peatlands store carbon for millennia and thereby regulate climate, provide water for millions, prevent floods and droughts and provide food. They also support unique biodiversity. Peatlands are also attractive with many captivating features for tourism.

Peatlands, hotspots for climate change mitigation

About 15% of the peatlands have been drained, covering less than 0.4% of the global land surface. Yet this relatively small area contributes 5% of global anthropogenic carbon dioxide emissions. Carbon dioxide emissions will stop when these areas are re-wetted.

The carbon dioxide emitted during fires in Indonesian peat-swamp forests in 1997 may have been equivalent to 13-40% of global carbon emissions from fossil-fuels in that year

Peatland restoration is now being adopted as a key priority for action in many parts of the world

Restoration efforts undertaken around the world are now seeking to restore drained peatlands in order to re-establish the multiple benefits arising from naturally functioning peatland ecosystems including mitigating carbon dioxide emissions.

China Ruoergai Plateau

The extensively degraded sedge-peat headwaters of the Yellow River are being re-wetted using dams and other methods to restore natural water flows and peatland habitat.

Russia Moscow Province

Following large-scale fires in 2010, 73,000 ha of agriculturally-drained and industrially-cut peatlands are now being re-wetted.

For more information on the China, Russia and Indonesia case studies, please contact Wetlands International: www.wetlands.org

Nordic and Baltic region

Intensive hydrological and ecological restoration of peatlands is now taking place in reaction to centuries of drainage in Denmark, Estonia, Sweden, and in Finland where over 20,000 ha of peatlands drained for forestry have been restored. An assessment of peatlands' extent and emissions for all countries in the region was supported by the Nordic Council of Ministers and is available at: www.norbalwet.org

Indonesia Central Kalimantan

A 108,000 ha peatland Ecosystem Restoration Concession has been established in the Katingan area with a 60-year license, financed with private sector carbon funding. It is a high biodiversity area supporting a large population of Orangutan. Restoration involves the closing of drainage ditches, stopping logging and restoring the vegetation. Paludiculture of native peat swamp species is being piloted with local communities.

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The Ramsar Convention

The Convention on Wetlands of International Importance, commonly known as the Ramsar Convention, is a global inter-governmental treaty that provides the frame-work for national action and international cooperation for the conservation and wise use of wetlands and their resources. It is the only global treaty to focus on one single ecosystem.