



World Wetland Day 2022 – Wetlands in Guyana

This week we will continue to look at wetlands in Guyana, focusing on the benefits and values of wetlands and the need for conservation. We will also examine the North Rupununi wetlands which exists here in Guyana.

Wetlands can be best described as fresh, brackish or salty bodies of water, which can vary from large lakes to ponds, swamps, peat lands and bogs, slow streams, lagoons and estuaries. They also include ditches, water races, mining pits and hydro lakes.

Wetlands are very important and dynamic ecosystems. They support unique plants and animals which interact with each other and the wetland environment to obtain the things they need to survive. As conditions change, the wetland as a unit changes and so do the types of animals and plants they support.

The value of wetlands

Wetlands are among the most productive ecosystems in the world, comparable to rain forests and coral reefs. They support numerous species from all of the major groups of organisms – from microbes to mammals. In fact they are home to more animal and plant species than any other type of habitat!

The value of a wetland and the services it provides depends on a complex set of relationships between the wetland and the other ecosystems in the watershed.

Wetlands provide a number of ecological services. They serve as nurseries for freshwater and marine fish and store and purify water. Wetlands also replenish ground water and store carbon. They retain nutrients and sediments and also support a wide range of animals and plants (bio-diversity). Because water drains into wetlands they play an important role in flood control.

Wetlands are also of significant benefits to society as they offer spaces for recreation and tourism opportunities, and creating jobs and income generating and leisure activities. They also provide food for people and a place for them to practice some cultural traditions. Transport and research services are also provided by wetlands.

North Rupununi Wetlands in Guyana

The North Rupununi wetland system is one of the largest wetlands in Guyana, which encompasses an area of 22,000 hectares of periodically flooded savanna and forest. These wetlands are dominated by the Rupununi, Rewa, and Essequibo Rivers, and include over 750 lakes, ponds and inlets!

Uniquely, the North Rupununi Wetlands is a portal between two major river basins, the Amazon and the Essequibo. Seasonal flooding allows aquatic wildlife from one river system to mix with the other resulting in this huge diversity of wildlife.

Over 450 species of fish have been recorded in the area, leading to estimates of up to 600 species for the larger wetland system. This is the highest fish diversity in the world for areas of similar size.

The wetlands are also home to the Guyana's endangered giants which in turn supply a food chain to these endangered species such as the Black Caiman (*Melanosuchus niger*), Giant Otter (*Pteronura brasiliensis*), Giant River Turtle (*Podocnemis expansa*), and recovering populations of the largest freshwater fish in the world, the Arapaima (*Arapaima gigas*).

Importance of the North Rupununi Wetlands

The North Rupununi Wetlands plays a crucial role in the lives of approximately 5000 residents in the area's 16 primary communities. The rivers and waterways act as the main transportation routes and sources of drinking water. Water-loving palms and other vegetation are used for housing, craft making, traditional medicine and food.

Additionally, fish represents a major source of protein in local communities, while other wildlife species of commercial and subsistence value depend on the wetlands for survival. The North Rupununi wetlands also feature a prominently indigenous culture and folklore, and have significant aesthetic value, serving as a primary place of recreation for local residents.

North Rupununi wetlands resources were respected and managed by the communities themselves through their own traditional systems. However, over time many of these traditional systems have weakened and many Wetland resources, particularly fish, have begun to show the strain of overuse.

The challenge now is to re-establish community-based management of local wetlands resources, and work with communities to improve resource monitoring, management planning and decision-making. The North Rupununi Wetlands Project has taken up this challenge. The North Rupununi Adaptive Management Process or NRAMP is a decision-making tool which individuals, communities and institutions can use to develop plans to manage day to day livelihoods activities and natural resource management scenarios. The process uses the learning cycle which forms the basis for every decision and action that we make and enact in our everyday life. This course aims to strengthen the capacity of community members to understand the North Rupununi Adaptive Management Process in order to develop suitable adaptive strategies for management of natural resources and community livelihoods within the North Rupununi.

You can share your ideas and questions by sending letters to: "Our Earth, Our Environment", C/O Communications Department, Environmental

Protection Agency, Ganges Street, Sophia, GEORGETOWN, or email us at: eit.epaguyana@gmail.com, follow us on Facebook and Instagram, and subscribe to our YouTube channel.