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Exploring Sri Lanka's Diverse Grasslands: From Savannahs to Villus

Grasslands of Sri Lanka are not mere open fields, but intricate ecosystems alive with diverse life, shaped by the harmonious blend of climate and elevation, and playing a vital role in our nation's biodiversity. From sprawling savannahs to captivating Villus, these landscapes beckon us to explore and protect. However, a shadow of misconception looms, painting these thriving grasslands as barren wastelands, leading some to attempt misguided "restorations" with trees. What a missed opportunity it is to overlook the intricate dance of life within. Let us unveil the true essence of these enchanting realms, where every tuft of grass and wildflower whispers nature's resilience.

Imagine endless grasslands stretching out, adorned with scattered trees that seem to paint the landscape. These are savannahs, special ecosystems found in dry to intermediate climates. In Sri Lanka, two types of savannahs exist: low-altitude ones below 300 meters and high-altitude ones between 300 to 500 meters.The mystery of these savannahs' origin adds to their allure. Some argue human-controlled fires played a part, while others credit natural factors like soil and climate. These grasslands endure periodic fires, with trees showing incredible resilience. Sadly, uncontrolled fires can lead to loss of vegetation and soil erosion.

A Peek into the Savannah Structure

Savannahs have a unique structure. You'll find scattered trees spread across the grasslands, creating a layer around 10 to 15 meters tall. The higher regions showcase trees like aralu, bulu, nelli and kahata and grass species like Themeda triandra, while lower areas boast bulu and grasses such as Aristida setacea.

These striking landscapes thrive in specific areas. High-altitude savannahs dominate the Uva basin, while low-altitude ones color places like Bibile, Moneragala, and Mahiyangana.

Challenges and Hope for Savannahs

Savannahs face threats from human activities, like burning for grazing, especially during May to August. However, nature's healing touch arrives with the rainy season in November, rejuvenating these vital ecosystems.

Diverse Grasslands: Patana, Talawa, Damana, and Villu

Sri Lanka's grasslands go beyond savannahs. Patana grasslands flourish above 500 meters, split into Dry and Wet patanas based on rainfall. The wet types, found above 1500 meters, host a variety of grasses and herbs, with unique species like Sphagnum and carnivorous Drosera.

Dry patanas, situated at 500 to 1600 meters, dance between humid and summer variations. Grasses like pangiri maana and piniburu thana dominate, though invasive species also make an appearance. Some divide these as Humid dry patanas (Kandy, Gampola, Ramboda etc.) and summer dry patanas (Uva basin-Welimada, Bandarawela, Haputale) where the latter has a second dry period around June to August. The temperature ranges from 18-24 ºC. They are mostly found in slopes and often are prone to serious erosion, resulting in exposed bed rock. Talawa grasslands act as transitional zones, featuring tall turf grasses on the slopes of Haldumulla.

Damana Grasslands:

The Heart of the Arid Damana grasslands, covering vast arid regions, are shaped by rainfall, temperature, and soil. Found in places like Yala and Wilpattu, they provide essential grazing for local wildlife and cattle, forming a vital ecosystem

Villus: Wetland Wonders

Villus, remnants of former river bends, are enchanting wetlands found in the Mahaweli flood plain. A typical example is the inter-connected Handapan and Pendiya Villus(796 ha) which is the largest of the entire Mahaweli Villu system. The Wilpattu National Parkalso contains several Villu ecosystems from the Kala oya flood plains. These water logged havens play a crucial role in local wildlife and provide sustenance for communities with fish and prawns. But human encroachment and altered hydrology threaten their delicate balance.

Grasslands: A Symphony of Diversity

Spanning from vibrant savannahs to captivating Villus, the grasslands of Sri Lanka form a tapestry of existence. Every variant narrates its distinct tale, molded by the touch of nature and the obstacles surmounted. While delving into these marvels, it's crucial to bear in mind the significance of conserving these habitats, ensuring their endurance for future generations. Beyond their rich biodiversity, these ecosystems offer an array of essential services and function as vital carbon sinks.

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