

## Background

The Everglades is a unique and complex subtropical wetland ecosystem often referred to as a “river of grass” due to its slow-moving sheet flow of water across a broad expanse of sawgrass marsh. Once covering approximately 20 million acres, the Everglades has undergone significant ecological change due to extensive development, water diversion, and land reclamation efforts that began in the late 19th century. These interventions have led to the degradation of natural hydrological patterns, habitat loss, and declines in biodiversity.

Alongside its ecological importance, the Everglades holds deep cultural and historical significance for the Miccosukee Tribe, an Indigenous Tribe with long-standing ties to the region. During the 19th century, the Miccosukee used the difficult terrain of the Everglades as a refuge during the Seminole Wars. Their unique knowledge and practices allowed them to survive in an otherwise challenging environment. Today, the tribe remains an active stakeholder in the preservation and restoration of this landscape.



Figure 1. Chickee Illustration from Miccosukee Village Museum



Figure 3. Matlack Ariel image of camp, Miami, ca. 1910 from Village Museum

## Tree Islands

Mammal communities, ranging from small rodents to larger species like the black bear, selectively use tree islands based on hydrological stress. Islands with shallower surrounding marshes exhibit higher mammal diversity, greater resource availability, and increased levels of habitat use (Bozas, 2024). These ecological dynamics are dependent on local water levels, with diversity and use declining in more inundated areas.

Bozas highlights that fauna are not passive inhabitants; they actively shape the structure, chemistry, and growth of tree islands. Through activities like foraging, defecation, nesting, and movement across the landscape, animals redistribute nutrients and seeds. Zoochory dominates dispersal networks in tree island ecosystems. In the Everglades, hardwood hammocks within tree islands are almost entirely composed of endozoochorous tree species, meaning their seeds must pass through animal digestive systems to successfully establish (Bozas, 2024). This creates a feedback loop where wildlife not only depends on tree islands but actively regenerates them.



Figure 4. Yearling Black Bear foraging cocoplum tree (Bozas, 2024)

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## Miccosukee Conservation and Restoration Efforts

The necessity to protect the Everglades is intertwined with Miccosukee culture and politics. This reciprocal protection relationship is apparent in the preamble of the Miccosukee Tribe’s constitution.

CONSTITUTION OF THE MICCOSUKEE TRIBE OF INDIANS OF FLORIDA

### PREAMBLE

We, the members of the Miccosukee Tribe of Indians of Florida, in order to establish an organization, promote the general welfare, conserve and develop our lands and resources and secure for ourselves and our descendants the blessing of liberty and freedom do ordain and establish this constitution and by-laws.

Figure 5. Preamble excerpt pictured at Village museum

## Administrative Departments:

Departments of Land Resources, Water Resources and Fish & Wildlife all work together today to preserve the Everglades as directed by the Tribe. (Museum visit, 2025)

Ongoing projects include but are not limited to:

- Managing invasive plants and species
- Water sampling to track chemicals levels
- Periodic inspection and maintenance of tribal lands including family camps and tree islands
- Monitoring water levels, vegetation, and animal movements
- Coordinating controlled burns

## Conclusion

The Miccosukee Tribe strives to protect the Everglades, with multiple conservation and restoration efforts. The Everglades is an intricate ecosystem bursting at the seams with life, all of which has been challenged by disruption of this water system caused by development. Development has disrupted the flow of this river of grass, and everything interconnected with it, including animals, tree islands, and members of the Miccosukee tribe. The story the Miccosukee and the Everglades shows how human action can cause huge ripples, highlighting the need for thoughtful action, conservation and restoration efforts.

## Acknowledgements

The information in this project was gathered from a visit to the Miccosukee Village Museum, meetings with the Miccosukee Historical Working Group, and studying Dr. Marcel Bozas’ dissertation titled “Spatiotemporal Use of Mammalian Tree Islands” .

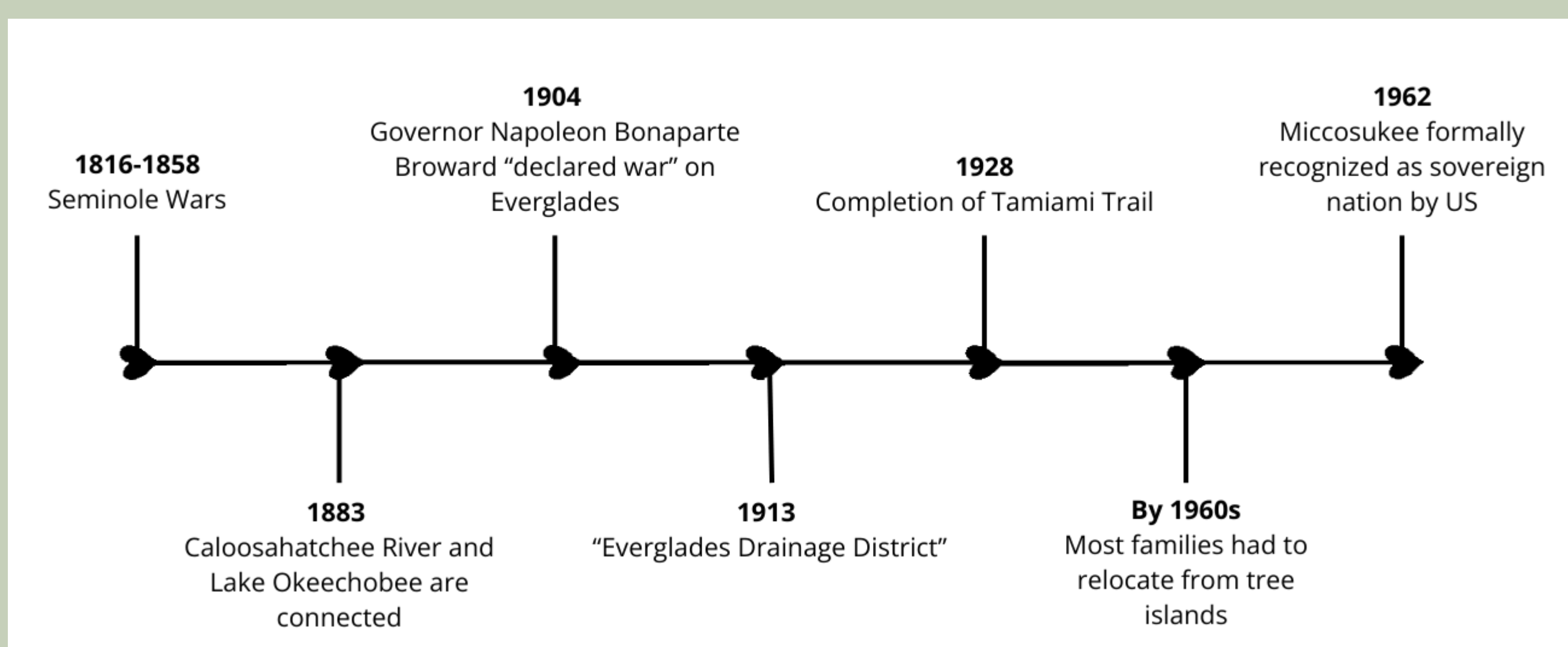


Figure 2. Broad land impact cause and effect timeline