

## **exceptional natural beauty and aesthetic importance;**

This is why people come to the ONWR from all over the world: to see the birds, alligators, fish, raccoons, black bears, dragonflies, spiders, and other wildlife of the Okefenokee Swamp, among their native cypress, blackgum, maple, and pine trees. The ONWR has been a RAMSAR wetland of international importance since 1986. <https://rsis.ramsar.org/ris/350> “The swamp is a mosaic of habitats from wet marshes, lakes, scrub-shrub, cypress forests, and islands of oak and pine. Fire and water define the swamp’s habitats. Habitats provide for endangered and threatened species such as red-cockaded woodpeckers, wood storks, indigo snakes and a wide variety of other wildlife species. It is world renowned for its diverse amphibian populations.”

## **(viii) to be outstanding examples representing major stages of earth's history, including the record of life, significant on-going geological processes in the development of landforms, or significant geomorphic or physiographic features;**

The eastern dam of the Okefenokee Swamp is Trail Ridge, which is hypothesized to be ancient shoreline beach dunes, and certainly dates from as far back as the Cretaceous era, 65 million years ago, when much of the current Southeast U.S. Coastal Plain was under the sea.

[https://www.researchgate.net/publication/275619883\\_Heavy-Mineral\\_Mining\\_in\\_the\\_Atlantic\\_Coastal\\_Plain\\_and\\_What\\_Deposit\\_Locations\\_Tell\\_Us\\_about\\_Ancient\\_Shorelines](https://www.researchgate.net/publication/275619883_Heavy-Mineral_Mining_in_the_Atlantic_Coastal_Plain_and_What_Deposit_Locations_Tell_Us_about_Ancient_Shorelines)

The depression now housing the Swamp itself is hypothesized to have been formed by waves bouncing off Trail Ridge when it was offshore barrier islands.

<https://www.georgiaencyclopedia.org/articles/geography-environment/natural-history-okefenokee-swamp>

Trail Ridge also contains significant deposits of titanium dioxide, coveted for white paint and other uses. Most sections north and south of the Swamp having already been mined, now for the second time in two decades miners are attempting to exploit Trail Ridge within miles of the Swamp.

## **(ix) to be outstanding examples representing significant on-going ecological and biological processes in the evolution and development of terrestrial, fresh water, coastal and marine ecosystems and communities of plants and animals;**

The Okefenokee Swamp is characterized by dynamic disclimax, most easily illustrated by its plant communities: “The successional climax community would be southern mixed hardwoods, but it is never realized due to continuous natural and anthropogenic disturbance. The model for plant community succession is from open marsh to cypress, or from shrub swamp to broad leaved evergreen or mixed hardwood forests (Hamilton, 1982; Glasser, 1986). Plant succession is routinely set back by such factors as historically frequent fires (INR Progress Report, 1987), the upwelling of peat batteries due to outgassing of 266 methane from peat decomposition (King et al., 1981), and the influence of the fluctuating water table (Greening and Gerritsen, 1987). In the early 1900's, canals were dug and the swamp was logged of its dominant cypress communities, further altering evapotranspiration, water flow and community structure. These recurring disturbance regimes lead to a heterogeneous and ever changing "disclimax" ecosystem with a mosaic of habitats.”

<https://smartech.gatech.edu/bitstream/handle/1853/44153/BergstedtA-97.pdf>