





Introduction

Vocabulary

General facts

Location

Abiotic Factors

Climate

3 examples

Threats/Problems

Ways to save the swamp

10 things you can do to save the swamps

Plants in the wetlands

Animals in the wetlands

Case study: Mangrove swamps

Global Importance

Sources

Vocabulary



- crab-eating frog
- manatee
- pistol shrimp
- peat
- salinity
- varying
- murky
- spongy



• German

- Krabben-fressender Frosch
- Seekuh
- Pistolenkrebs
- Torf
- Salzgehalt
- Variierend
- Trübe
- schwammig

General Facts

- Swamps are forested, low, spongy landscapes generally saturated with water and covered with trees and aquatic plants
- Big parts of **swamps** are often flooded with water
- Swamps are nesting and breeding grounds for birds and other animals
- About 6 percent of Earth's surface are covered by swamps

Vocabulary spongy=schwammig saturated=gesättigt

Location



- can be found on all continents (except Antarctica)
- Biggest swamp of the world is the Pantanal in Brazil
- Notable examples: Okavango Delta (Africa), Vasyugan Swamp (Russia), Everglades (North America)

Abiotic Factors

Vocabulary

stalled=ins Stocken geraten murky=trübe decay=Verwesung, Zerfall - **slow movement of water**--> stalled water

- the mineral content in the soil is high-->many plants

-**low oxygen level**-->(no decay...) giving the swamp water its murky, cloudy color

Climate



-lots of precipitation,

-that helps the plants and animals that live there because they need lots of water to remain alive

-The climate is very damp, not too hot or cold

-rain is very important to this biome because if the rain contains harmful acids it would hurt the environment tremendiously.

Vocabulary tremendiously=enorm damp=feucht

The Everglades



	Max. Temperatur	Min. Temperatur	Sonne Std. Tag Ø	Wasser Ø	Regentage Ø
anuar	21	11	7	20	7
ebruar	22	12	8	22	7
März	24	14	9	23	6
April	27	17	9	25	5
Mai	30	20	10	27	7
Juni	31	23	10	29	15
Juli	32	25	10	30	17
ugust	33	25	9	30	17
otember	31	23	9	30	15
ktober	30	21	8	29	8
vember	27	18	8	26	5
zember	24	16	7	24	7
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Bangweulu Wetlands



Climate Chart Bangweulu Wetlands - 1,160-1,186m / 3,806-3,891ft

SAFARIBOOKINGS.com



* Averages based on 50 years of monthly climate data, taken from 1km² (0.39mi²) interpolated climate surfaces. © chart & park data: SafariBookings. © climate grid data: WorldClim project. All rights reserved.

Pantanal

The Pantanal is located between the rainforest, Brazil's vast grasslands and Paraguay's dry forests -->a **magnet for animals**





Threats/Problems

- Many farmers are **burning the swamps** in Brazil to clear them out (for cattle etc.)
- fires are getting out of control because of the dry constitution, which is a consequence of climate change
- Scientist expect more periods of extreme dryness of the swamps through the ocean's warming

Vocabulary cattle=Vieh constitution=Zustand





Dead buffalo on a scorched farmland in the pantanal

Threats/Problems

- Farmers and miners are used to scorch rainforests and wetlands for economic development
- The fires in Brazil got less attention through the coronavirus pandemic

Vocabulary to scorch=versengen, verbrennen

Threats/Problems

- Immigration of foreign animals that expel the native animals
- Nutrias, which are actually native to South America, destroy the flora and fauna of Louisiana





A nutria looks like a beaver, but it is something like a mixture of a beaver and a rat

Ways to save the wetlands

- Stop climate change...
- Alternatives for the farmers in Brazil
- Stop the immigration of foreign animals into swamps (Nutrias...)

10 things YOU can do to save the Swamp

Vocabulary litter=Abfall

to dispose=entsorgen detergents=Waschmittel laundry=Wäsche



- 1. **Join programs** that help protect and restore wetlands.
- 2. **Report** illegal activities.
- 3. **Pick up** all litter and **dispose** in appropriate trash containers.
- 4. **Plant** (only) local tree species!
- 5. Use "living shoreline" techniques to stabilize the soil.
- 6. **Avoid** wetland wood if you are expanding your home or installing a shed.
- 7. **Use** phosphate-free laundry and dishwasher detergents.
- 8. **Use** paper and recycled products made from **unbleached paper**.
- 9. **Use non-toxic products** for household cleaning.
- 10. **Reduce, reuse** and **recycle** household items and waste.

Plants in the wetlands

- Water Hyacinth
- Swamp Azalea
- Cypress tree
- Green and black ash
- Silver maple



Water Hyacinths & Cypress trees



Animals in the wetlands

Assign the animals to their names !!!!!!!!!





Manatee Pistol shrimp

Alligator

Red piranha

Crab-eating frog









Mangrove wetlands

- Mangrove areas are coastal wetlands found in tropical and subtropical regions
- characterized by halophytic (salt loving) trees, shrubs and other plants growing in brackish to saline tidal water.

Vocabulary

tidal water=von Gezeiten abhängiges Wasser shrubs=Büsche brackish water=Brackwasser

Distribution of Mangrove Wetlands



Adaptation of the mangroves



Mangroves adapted their leaves, their roots and their reproductive methods

Adapted in order to survive in a harsh, dynamic environment of soft, low oxygen soils and varying salinity

Adaptation of the mangroves

- Many mangroves filter salt out through their roots, so they only absorb the fresh water and use that to hydrate themselves
- Another strategy is to absorb the salt in their bark
- Some also use the salt excretion strategy, which is when they use special glands in their leaves to store the salt

Vocabulary salt excretion=Salzausscheidung bark=Rinde glands=Drüsen

Adaptation of the pistol shrimp

- it can shoot a power wave of bubbles out of its larger claw by snapping it
- capable of stunning larger fish and breaking small glass jars
- Adapted to defend itself from predators

Vocabulary

jar=Krug (Einmachglas) to stun=lähmen to snap=schnippen



Global Importance



Vocabulary peat=Torf carbon dioxide=CO²

Storing of carbon dioxide and producing of brown coal

Producing of oxygen

contains peat, a fossil fuel Habitat for many endangered species

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