



Lerneinheit 16 : Inseln und Biodiversität

Islands and biodiversity: The example of Cape Verde.

Lernziele: This learning unit is an introduction to the definition of an island. It also contains information about island biodiversity.

Lernergebnisse: After working with this unit, learners are able to understand and to explain the definition of an island and island biodiversity.. They are able to apply this knowledge to the example of Cape Verde.

Vorwissen: none

Zeitumfang: ca. 60 Min

Material: literature provided

Methoden / Techniken: textual work, description, transfer task, creative thinking, creative practical work, building an island model with natural materials, teamwork possible

Modul/Niveau: Module 1: Introduction to biodiversity – islands and biodiversity (Islands, Cabo Verde, ecosystem and biodiversity) / „first contact“

Einführung:

You will get to know the characteristics which define an island in general. After reading the text you will be able to understand island biodiversity.

Aufgaben:

Task 1.

Read material one (“What is island biodiversity?”). Do you understand the text? Are there any questions about unknown words? Write down the main characteristics which define an island.

Task 2.

Based on material one, write down the main features which define island biodiversity.

Task 3.

Think about biodiversity at Cape Verde. Do you know any examples of plants or animals which exist on the islands of this archipelago? As a help there are some pictures of plants and animals in material 1. (teamwork possible)

Task 4.

Creative work: Together with your teacher and your classmates go outside and collect the following things: wood, stones, sand and shells. In combination with water, plasticine and cork, build the island you live on. In other words, build a material model of an island.

Ressourcen:

Material 1. What is island biodiversity?

An explanation of island biodiversity should start with a definition of islands. Yet this definition is elusive. Although we can all agree that an island, strictly speaking, is a piece of land surrounded by water, beyond this stipulation, there is no single accepted definition. Islands located within seas can be categorized in many ways, including by their area; by their altitude into high and low-lying islands; by a combination of the size of the land area, and political and demographic criteria to identify small island developing states; by their distance from the nearest continent; whether there are inhabited or not; the number of inhabitants; or whether they are continental (land areas that used to be connected to the mainland) or oceanic (those that rose from the sea as a result of coral deposits, volcanic activity or tectonic forces) islands.

In terms of biodiversity, the issue is clearer: islands boast a truly unique assemblage of life. Species become island dwellers either by drifting on islands, like castaways, as they break off from larger landmasses (in the case of continental islands) or by dispersing across the ocean to islands newly emerged from the ocean floor (oceanic islands).

The legacy of a unique evolutionary history, many island species are endemic – found nowhere else on earth. Islands harbour higher concentrations of endemic species than do continents, and the number and proportion of endemics rises with increasing isolation, island size and topographic variety.

It has often been remarked that islands make a contribution to global biodiversity that is out of proportion to their land area. In this sense, they can be thought of collectively as biodiversity “hot spots”, containing some of the richest reservoirs of plants and animals on earth.

(Source: Revised Text from: <https://www.cbd.int/island/intro.shtml>, retrieved 25 august 2015)

Material 1: Plants and animals living at Cape Verde

All pictures cp.: https://en.wikipedia.org/wiki/Wildlife_of_Cape_Verde#Flora

Mögliche Resultate:

According to Task 1.

Possible unknown words:

- elusive = hard to definite
- stipulation = agreement, settlement, arrangement
- altitude = height
- to boast = to treasure
- dwellers = inhabitants
- to disperse = to cast forth
- to harbour = to contain

An island

... is a piece of land surrounded by water ... can be categorized in many ways (for example: area, size of the land area, political and demographic criteria, distance from the nearest continent and number of inhabitants ...)

According to Task 2.

Main features of island biodiversity:

- assemblage of life
- many island species are found nowhere else on earth
- islands show higher concentrations of endemic species than do continents

- islands contain some of the richest reservoirs of plants and animals on earth

According to Task 3.

Plants, for example:

- Losma (*Artemisia gorgonum*)
- Acacia tree
- Tornabenea
- Bellflower (*Campanula bravensis*)
- Flat-topped dragon tree (*Dracaena draco*)

Animals, for example:

- Grey long-eared bat
- Colour-ringed Raso lark (*Alauda razae*)
- Lago sparrow
- Lizards
- Green sea turtle

Thematisch ähnliche Lerneinheiten:

Verfasser:

Muy, Leonie; Schöffner, Sandra

From:

<https://foc.geomedienlabor.de/> - Frankfurt Open Courseware

Permanent link:

<https://foc.geomedienlabor.de/doku.php?id=courses:l:s-umwelterziehung:s01-biodiversity:m01-introduction:first-contact:main:16&rev=1441611491>

Last update: 2015/09/07 09:38

