

10. BIOGEOGRAPHY

1. Discuss in small groups:

- What is a biome?
- What do you think the picture represents?
- How does an ecosystem differ from a biome?
- What are different types of biomes?



2. Complete the description of a biome. Then listen and check.

climate ecosystem community herbivores vegetation latitude carnivores

A biome is a major ecological that includes an with similar climate and organisms. Because biomes are partially defined by they are loosely distributed by global..... . The climate of a biome dictates its native which in turn supports a select group of and The environment directly influences the appearance and behavior of organisms.

<http://science.howstuffworks.com/life/biomes-videos-playlist.htm>

3. Vocabulary. Match each word with the right meaning. Which word is a preposition?

- | | |
|----------------|--|
| 1. Soil | coniferous evergreen tree, cultivated for timber |
| 2. Amid | type of plant that sheds its leaves once a year |
| 3. Spruce | characterized by rich vegetation |
| 4. Deciduous | having to do with the Earth or dry land |
| 5. Lush | in the middle of |
| 6. Terrestrial | top layer of the Earth's surface where plants can grow |

4. Compare your answers from task 1 with the information from an encyclopedia.

A biome is an area of the planet that can be classified according to the plants and animals that live in it. Temperature, soil, and the amount of light and water help determine what life exists in a biome.

A biome is different from an ecosystem. An ecosystem is the interaction of living and nonliving things in an environment. A biome is a specific geographic area notable for the species living there. A biome can be made up of many ecosystems. For example, an aquatic biome can contain ecosystems such as coral reefs and kelp forests.

Not all scientists classify biomes in the same way. Some use broad classifications and count as few as five biomes. These are forest, grassland, freshwater, marine, desert, and tundra.

Other scientists use more precise classifications and list dozens of different biomes. For example, they consider different kinds of forests to be different biomes. Tropical rain forests that are warm and wet year-round are one biome. Temperate deciduous forests—those that have cold winters, warm summers, and are dominated by trees that lose their leaves—are a different biome. Taiga forests, which are in cold regions and are dominated by cone-bearing firs and spruces, are yet another biome.

Boundaries between biomes are not always sharply defined. For instance, there are sometimes transition zones between grassland and forest biomes. Coasts and wetlands are transition zones between terrestrial and aquatic biomes.

Biomes move as the climate changes. Ten thousand years ago, parts of North Africa were lush landscapes cut by flowing rivers. Hippopotamuses, giraffes, and crocodiles lived amid abundant trees. Gradually, the climate dried out. Today, this region is part of the Sahara Desert, the world's largest desert.

http://education.nationalgeographic.com/education/encyclopedia/biome/?ar_a=1

5. Look at the text and find words which correspond to these expressions:

- a) a special kind of seaweed
- b) water that is not salty
- c) exact
- d) the reproductive body of conifers made up of scales
- e) large, chiefly aquatic African herbivorous mammals
- f) present in great quantity, plentiful

Biomes and habitats- read about the difference and match pictures with habitats:

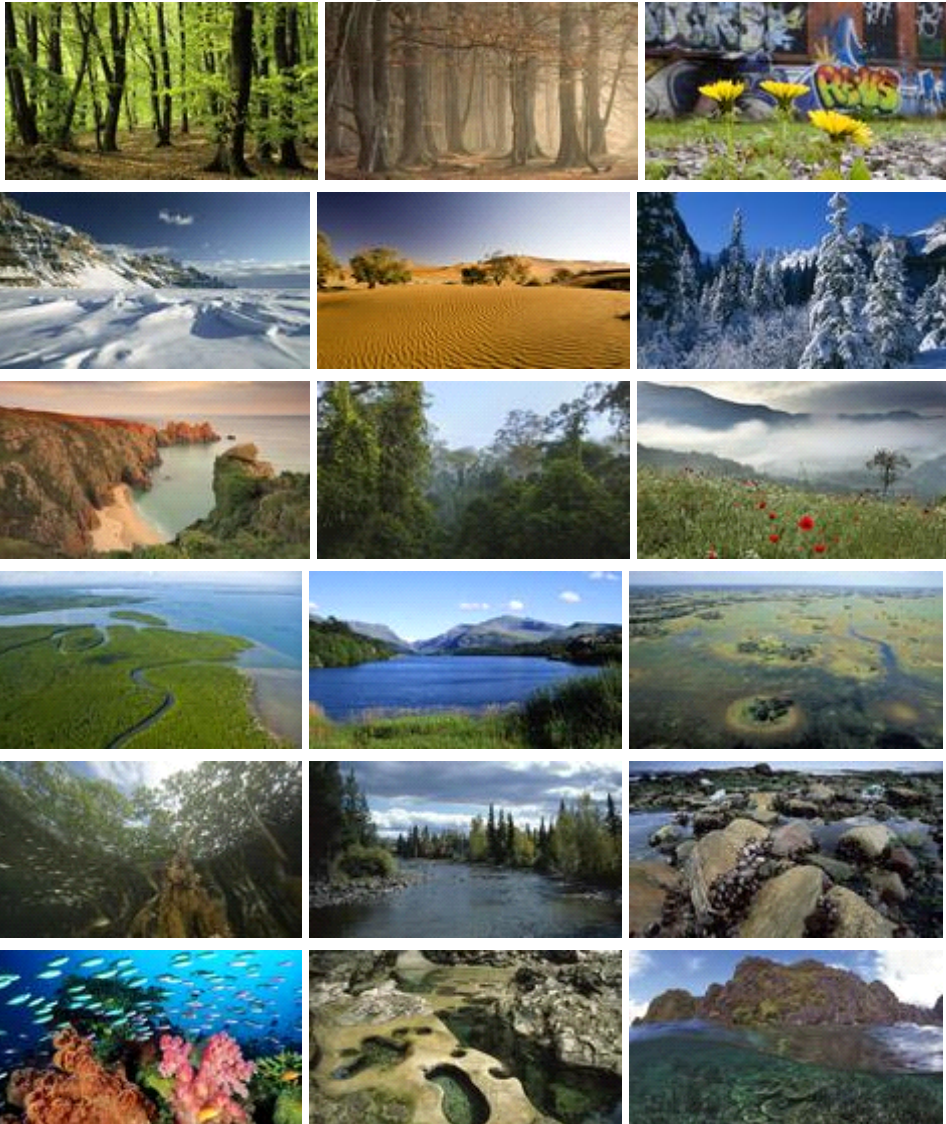
HABITAT

The natural environment in which an organism lives. A habitat is not necessarily a geographic area—for a parasitic organism it is the body of its host.

BIOME

The area or natural environment in which an organism or population lives. A major geographic region that contains a distinctive community of plants, animals, fungi, etc.

- | | | | |
|--------------------|------------------|-------------|--------------------|
| Beech wood | Broadleaf forest | Urban | Desert |
| Tundra | Coastal | Rainforest | Mountain grassland |
| Brackish water | Lakes and ponds | Wetland | Mangrove |
| Rivers and streams | Intertidal zone | Coral reefs | Rock pools |
| Shallow seas | Taiga | | |



Which of the zones do the following mammals inhabit?

puma	dolphins and whales	Arctic fox	yak	walrus
tundra	pelagic	coastal	mountain	

EXAMPLES OF SPECIFIC ZONES-Complete these types of zones in the descriptions below:

pelagic littoral chapparal brackish benthic

Any water in a sea or lake that is neither close to the bottom nor near the shore can be said to be in the zone. The word is derived from Greek πέλαγος, meaning "open sea".

..... is a shrubland or heathland plant community. It is shaped by a Mediterranean climate (mild, wet winters and hot dry summers) and wildfire, featuring summer drought-tolerant plants with hard sclerophyllous evergreen leaves.

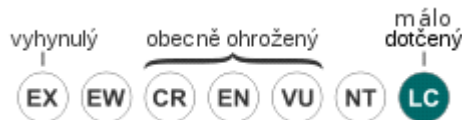
..... zone is the part of a sea, lake or river that is close to the shore. In coastal environments the zone extends from the high water mark, which is rarely inundated, to shoreline areas that are permanently submerged.

..... water or briny water is water that has more salinity than fresh water, but not as much as seawater. It may result from mixing of seawater with fresh water, as in estuaries.

The zone is at the lowest level of a body of water such as an ocean or a lake, including the sediment surface and some sub-surface layers. The organisms generally live in close relationship with the substrate bottom and many are permanently attached to the bottom.

CONSERVATION STATUS

- What is the Czech/Slovak term for conservation status?
- Translate the terms and match examples of species.



koala blue whale dodo snail white rhinoceros

LC - málo dotčený		platypus
NT - téměř ohrožený		
VU - zranitelný		lemur
EN - ohrožený		
CR - kriticky ohrožený		Siberian tyger
EW -vyhynulý v přírodě		
EX - vyhynulý		
DD - chybí údaje		fennec
NE – nevyhodnocený		

- What system of protecting the landscape is there in the Czech / Slovak Republic?
- What are some examples of localities with habitats of valuable species?
- Which species were displaced form the territory of these countries in the past? Are any of them returning?

- **Match the type of areas and the adequate characteristics**

Nature Reserve	a large area whose considerable part consists of natural ecosystems or ecosystems little affected by human activities
National park	a large area of harmonic landscape with a typical relief, with a considerable share of natural forest and permanent grassy ecosystems
Protected Landscape Area	a smaller area with concentrated nature features and ecosystems typical for a given geographical region

LISTENING Colts instead of Rifles

<http://www.radio.cz/en/section/curraffrs/colts-instead-of-rifles-ngo-to-introduce-wild-horses-at-former-army-bases>

You will hear a report about the re-introduction of wild horses into the Czech Republic.
Answer the questions.

1. Which breed of horses will be imported?
2. What is the name of the NGO involved in the project?
3. Which two countries are selling the horses to the CR?
4. Why were the original horses displaced?
5. Why is this breed ideal for the project?
6. Where will the horses be kept during adaptation time?
7. Which vegetation types will benefit from the horses?
8. Which locality will they be introduced to?
9. How can the horses help the landscape?
10. What is the reason for the title Colts instead of Rifles?

4. Explain in English the meaning of these phrases

1. eventual release of horses
2. weed-eating horses
3. marked benefits to environment
4. chief objective of the project
5. disused military sites
6. the breed has barely changed

HOMEWORK

Complete plural forms of these nouns

alga fungus species analysis synthesis

sources

<http://www.stepmap.com/map/geo-biome-map-196544> map + brief characteristics

<http://www.ucmp.berkeley.edu/glossary/gloss5/biome>

<http://www.eolss.net/Sample-Chapters/C01/E6-14-02-04.pdf> introduction to biogeography, textbook

H. Němcová – Mammals, English for Biologists

Video <http://science.howstuffworks.com/life/biomes-videos-playlist.htm>

www.wikipedia.com, <https://cs.wikipedia.org/>

<http://www.bbc.co.uk/nature/habitats>