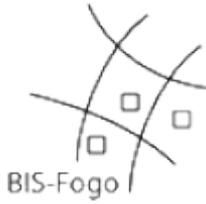# Activity 04: Endemism and Cosmopolism

Factors influencing endemic and cosmopolitan species

Objective: Learners lget to know more about factors influencing the presence of endemic and cosmopolitan species.

Learning outcomes: Learners are able to describe selected species and assign them to the categories „endemic" or „cosmopolitan". They are able to name and explain factors influencing the species' habitats. Finally they're able to compare cosmopolitan and endemic species in a table and give reasons for their choices.

Previous knowledge: Module 1 Endemic and cosmopolitan species
Duration: 40 min
Materials / Conditions: Internet
Methods / Techniques: research, description, gathering factual knowledge
Learning subject: Biodiversity / Module I: Introduction to biodiversity / Level: Advanced learning

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Introduction:
Cosmopolitan and endemic species differ fundamentally in the fact that they're either to be found everywhere or just in a single spot. But which factors influence these species in their locations and why do these differences exist?

Instruction:
1. Do some internet research (cf. Web address below) and chose one endemic plant and one endemic animal. Search for further information in order to determine why your chosen species is an endemic one. Pay special attention to the most important factors that need to be present to ensure your specie's survival.
http://www.caboverde.com/nature/plant-00.htm
http://www.caboverde.com/nature/aves-00.htm

2. Go to the Wikipedia pages of two cosmopolitan species. Why are these species cosmopolitan ones and which features allow for these species to spread to many locations and survive there?
https://en.wikipedia.org/wiki/Brown_rat#Diet
https://en.wikipedia.org/wiki/Miscanthus_sinensis

3. Based on your findings, try to create a table in which you contrast endemic to cosmopolitan species. Hereby you should include all common factors that mark their differences.

Resources:
/

Possible results / Results:
Concerning Task 3.
Unique suitable habitats vs. many suitable habitats worldwide; Factors might be: climate conditions, soil conditions, specific nutrients (saltiness etc.) biotic and abiotic factors, natural obstacles, availability and choice of nutrition…

Related activities:

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Aus dem Deutschen übersetzt von Jana Prokaka

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