



**Høgskolen i Telemark**

**Exam**

**4505 Conservation Biology**

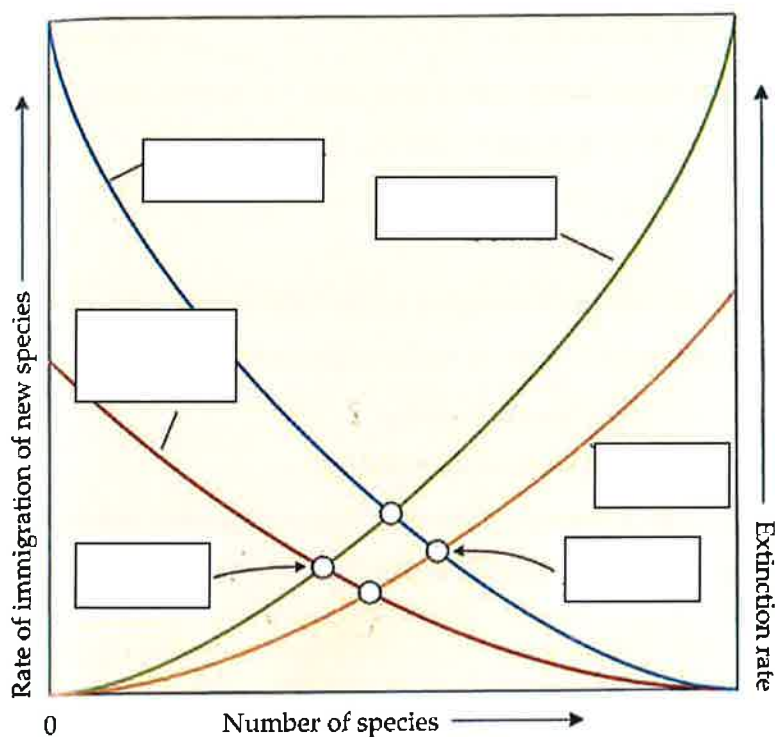
**13.5.2015**

Tid/Time :	9-13
Målform/Language :	English
Sidetall/Pages :	3 with cover page
Hjelpemiddel/Aid :	Dictionary
Merknader/Notes :	All questions count the same.
Vedlegg/Appendix :	None

**The results will be published on Studentweb.**



1. Explain the following terms (use examples we discussed in the lectures or on the excursion):
  - a) SLOSS debate
  - b) Tragedy of the commons
  - c) DNA barcoding
  - d) Red Listed species
  - e) Rare species
  
2. Biodiversity
  - a) What are the three levels of biodiversity?
  - b) Explain the levels.
  - c) List five threats to biodiversity that result from human activity.
  
3. Extinction
  - a) Explain the differences between a species being extinct, extinct in the wild, regionally extinct, extant, and “the living dead”. Give species examples for each!
  - b) The diagram (see under) shows the theory of the island biogeography model, fill in the gaps and explain the diagram.
  - c) Explain the high number of large mammals occurring in Africa compared to the lower number in other continents.



4. You estimated your personal ecological footprint in the lectures.
  - a) Discuss how your footprint breaks down; what keeps your footprint high, what keeps it low?
  - b) Compare your footprint with the world's average footprint and the average Norwegian footprint.
  - c) How can extreme differences in the ecological footprints of industrial countries compared to developing countries be a problem for the protection of biodiversity?
  
5. Establishing protected areas: Because of limited natural resources and government funding, it is not possible to conserve every living species on the planet.
  - a) Which three species criteria are often used to set conservation priorities. Use the Komodo dragon as example to explain these three criteria.
  - b) Focal species are species that can provide the impetus to protect an area or ecosystem. Name three types of focal species and explain them by using examples.
  
6. Ex situ conservation is a supplement to in situ conservation. Zoos can be ex situ facilities.
  - a) Name two other ex situ facilities.
  - b) Discuss what role the "Bjørneparken" (bear park) in Flå plays in conservation context.
  - c) Surplus animals can be a problem in zoos. How does the Bjørneparken deal with that problem? Name four other limitations of ex situ conservation.
  
7. A nature reserve is a protection category according to the IUCN. During the excursion, we visited the Trillemarka nature reserve, which is Norway's largest forest reserve.
  - a) Explain the protection category nature reserve!
  - b) Why is forest protection in Norway so important?
  - c) What were the difficulties when the Trillemarka nature reserve was established and what were the two main threats for the area?