



WHAT IS ECOLOGY?

Ecology is a science that studies the relations between living organisms and the environment, as well as the mutual relations between living organisms ...

WHAT ECOLOGY IS NOT

Ecology is **not** a science of environmental protection

Ecology is **not** a science of environmental protection, nor is it a study of human impact on nature

Ecology is **not** a science of environmental pollution



What is an introduction of species?

An introduction of species is the intentional or unintentional introduction of species (subspecies, genera, or families) into areas that they do not naturally inhabit.

What is landscape modification?

Landscape modifications can be the result of natural disturbances and/or be man-made.

What is overexploitation?

When there is intensive exploitation and the capacity for recovery is exceeded, we say that there is overexploitation of natural resources.



What is climate change?

Long-term change of climate, including changes in average temperature and precipitation, is called climate change.



What is ozone?

Ozone is a thin layer of modified oxygen found in the stratosphere. It is a molecule that contains 3 oxygen atoms (O_3) and plays a major role in the absorption of ultraviolet rays.



What is ozone depletion?

The gradual depletion of the ozone layer is a result of the influence of the chemical compounds chlorofluorocarbons, hydrogen chlorofluorocarbons and others.



What is acid rain?

Acid rain is a serious global disorder caused by nitrogen and sulfur oxides resulting from industrialization, heavy traffic, and daily household activities.



What is global warming?

Global warming is the increase in the average temperature of our planet, as a result of the increased presence of greenhouse gases in the atmosphere

Biodiversity - Macedonia



MAMMALS
83+1 type
(8 allochthonous)



AMPHIBIANS
15 species
(10 frogs, 5 tailed: newts and salamanders)



MOSS
500 species



BIRDS
332 species



REPTILES
32 species
(4 - turtles, 12 - lizards, 16 - snakes)



FISH
100 autochthonous
and 20 allochthonous species



ALGAE AND FUNGI
over 2000 species



VASCULAR PLANTS
3200 species

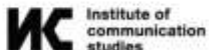


INVERTEBRATES
about 13 000 species

Around **22 000**
species, of which
around **1000** are
endemic



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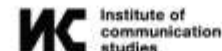
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The main reasons for the extinction of species today are habitat losses, over-exploitation, invasive species, climate change, etc.



We can protect biodiversity by applying scientific, legal, and direct protection measures (*in situ* and *ex situ* protection, introduction and reintroduction of species, education, etc.)

Our planet is inhabited by about **8 million** different organic species.



According to the IUCN Red List of Threatened Species, from the 19th century up to the present day, almost **800 species** have gone extinct.

What are we trying to change in our lives to improve the environment?



Saving energy and producing it from renewable sources.



Reduction of pollution and waste in the environment.



Introduction of economical models of production and consumption, etc.

Reduce, reuse, recycle



Waste treatments through recycling.



Protection against land degradation through sustainable agricultural practices.



What is waste?

Waste can be defined according to the place of formation - municipal waste (garbage), industrial waste, agricultural waste, as well as special waste (commercial, radioactive, medical, etc.).



How is the waste divided according to the degree of danger?

According to the degree of danger, the waste is divided into:

- hazardous
- non-hazardous
- inert

Improper waste management is one of the biggest problems in terms of environmental protection.

Во Македонија
ИМА ВКУПНО



54 легални депонии



There are at least 100 illegal landfills in the country.



Uncontrolled fires pollute the environment.



Informal landfills pollute groundwater and surface water through infiltration of rainwater and waste.



Integral and rational waste management is imperative for a clean environment



Waste can be defined according to the place of formation



Disposal of untreated waste increases the possibility of accumulation of toxic substances in the food chain



Untreated waste causes greenhouse gas emissions, soil, air, and water contamination, and loss of landscape values