

# **Výukový materiál zpracovaný v rámci operačního programu Vzdělávání pro konkurenceschopnost**



INVESTICE DO ROZVOJE VZDĚLÁVÁNÍ

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# Technical English



Předmět:	Anglický jazyk
Ročník:	2.NM
Klíčová slova:	ecology, environment, pollution
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# Technical English

## Ecology



## Ecology

- The study of organisms in relation to each other and to their environment.
- The word comes from the Greek oikos (home) and logos (speech).
- It applies scientific methods to the basic study of nature.

## An Ecologist

- Is a person who has knowledge of zoology, botany, geography and other sciences to understand all living things.



# Technical English

## Ecology

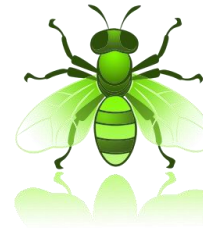


### Ecosystem

- Living community that contains an energy source (sun), abiotic chemicals and organisms that function as producers (plants), consumers (animals) and decomposers (bacteria).

### Biome

- Largest ecological unit
- Includes all of the plants and animals of a particular region of Earth.( tundra, taiga, desert...)



# Technical English

## Ecology



### Environment

- Total surrounding of the living things.
- **Environmental studies** is the interdisciplinary academic field which systematically studies human interaction with the environment in the interests of solving complex problems.
- **Problems:**
  - ***The man*** – he reduces the area where plants and animals can exist and that is why some animals and plants have disappeared.

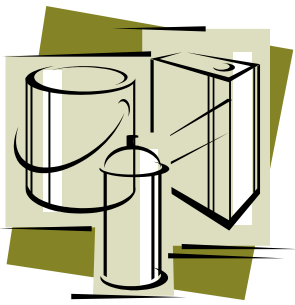


# Technical English

## Ecology



- ***The air pollution***-is caused by the fumes of millions cars and chimneys. The pollutants can be in the form of solid particles, liquid droplets, or gases. They may be natural or man-made.(dust, ash, volcanoes, motor vehicles, power stations..)
- ***The water pollution***-is the contamination of water bodies (e.g. lakes, rivers, oceans,..) It occurs when pollutants are directly or indirectly discharged into water bodies without adequate treatment to remove harmful compounds.(oil, chemicals...)



# Technical English

## Ecology



- ***A pollutant*** - is a substance that makes land, water, air, etc., dirty and not safe or suitable to use. A pollutant may cause long- or short-term damage by changing the growth rate of plant or animal species, or by interfering with human amenities, comfort, health, or property values.
- **Solution:**
  - Solutions to many of these problems require action by governments, companies and ordinary people across the globe.



# Technical English

## Ecology



**The ways how to protect the environment are:**

- To cut down on car journeys
- To avoid long haul flights
- To minimize the use of agricultural fertilizers
- To pick up litter and rubbish that might harm wildlife
- To recycle litter and rubbish (paper, metal, clothes, glass, plastic..)
- To reduce burning of fossil fuels and to develop renewable energy resources.

# Technical English

## Ecology



### Agriculture and ecology

#### ➤ *Sustainable agriculture (udržitelné zemědělství)*

- is the act of farming using principles of ecology. Sustainability can be understood as an ecosystem approach to agriculture.
- Two of the many possible practices of sustainable agriculture are **crop rotation** and **soil amendment**, both designed to ensure that crops being cultivated can obtain the necessary nutrients for healthy growth. Soil amendments would include using locally available compost from community recycling centers. These community recycling centers help produce the compost needed by the local organic farms.

# Technical English

## Ecology



### ➤ *Agro ecology (zemědělská ekologie)*

- the study of the interactions between plants, animals, humans and the environment within agricultural systems.
- An agro ecosystem is the basic unit of study for an agro ecologist.
- an agro ecologist studies agriculture's various relationships with soil health, water quality, air quality, surrounding flora, environmental toxins, and other environmental contexts.



# Technical English

## Ecology



### Practice 1 (True or False)

- 1) Ecology is the study of organisms in relation to each other and to their environment.
- 2) The ecologist must be good at English.
- 3) Ecosystem is a dead community that contains an energy source (sun), abiotic chemicals and organisms that function as producers (plants), consumers (animals) and decomposers (bacteria).
- 4) Biome is the largest ecological unit.
- 5) A pollutant - is a substance that makes land, water, air, etc., dirty and not safe or suitable to use.

# Technical English

## Ecology



**Practice 2** (match the word to the definition)

- 1) Crop rotation
- 2) Environment
- 3) The water pollution
- 4) Sustainable agriculture

- a) Total surrounding of the living things.
- b) is the contamination of water bodies (e.g. lakes, rivers, oceans,...)
- c) is the act of farming using principles of ecology.
- d) One of the many possible practices of sustainable agriculture

# Technical English

## Ecology



### Practice 3 *(answer the questions)*

- 1) What does ***ecology*** deal with?
- 2) What are the main ***ecological problems*** today?
- 3) How can you ***protect*** the nature and environment?
- 4) How do you understand the term ***Sustainable agriculture*** ?
- 5) What is ***Agroecology***?
- 6) What's your opinion on ***ecology***?

# Check your answers



## Practice 1

T	F	F	T	T
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## Practice 2

1D	2A	3B	4D
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## Practice 3

Slides 3 – 11 or students' own answers



# Použité zdroje



- Veškeré použité obrázky (kliparty) pocházejí ze sady Microsoft Office 2010.
- Všechny fotografie pochází z archivu autora nebo Wikipedie
- O'Sullivan N., Libbin J.D., *Agriculture*, Express Publishing 2011
- <http://www.wisegeek.org/what-are-some-environmental-problems.htm> 5.12.2013

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