# Environmental problems of the world

### Key environmental problems:

- Deforestation
- Depletion of the ozone layer
- Reduction of biodiversity
- Water pollution
- Overpopulation
- Oil pollution
- Land degradation
- Waste

#### Deforestation

Forest enrich the atmosphere so necessary for the life of oxygen, absorb carbon dioxide, released by animals and humans in the process of respiration, as well as industrial enterprises in the process. They play a major role in the water cycle. Trees take water from the soil, it is filtered, cleaned of impurities, and release into the atmosphere, increasing the humidity of the climate. Forests affect the water cycle. Trees raised underground water, enriching the soil and keeping them from desertification and erosion - no wonder when deforestation instantly become shallow river.



According to the reports of the Food and Agriculture Organization of the United Nations, deforestation continues around the world with great speed. Annually loses 13 million hectares, whereas only grows 6 hectares.

This means that every second from the planet disappears forest the size of a football field.

A considerable problem in the fact that these data are obtained directly from the organization of governments, and governments prefer not to specify in their reports related losses, such as illegal logging.

#### Ranking countries on deforestation:

- 1 Russia
- 2 –Canada
- 3 –Brazil
- 4 –USA



#### Depletion of the ozone layer

About twenty kilometers above the planet reaches the ozone layer - Earth's ultraviolet shield.

Emitted into the atmosphere fluorinated and chlorinated hydrocarbons and halogen compounds destroy the structure of the layer. He is exhausted and this leads to the formation of ozone holes. Penetrating through them harmful ultraviolet rays are dangerous to all life on Earth. Especially they adversely affect human health, and his immune system gene, causing skin cancer and cataracts. Ultraviolet rays are dangerous to the plankton - the basis of the food chain, higher plants and animals.

Today, under the influence of the Montreal Protocol by almost all the technologies that make use of substances that deplete the ozone layer, found alternatives, and production of these substances, trafficking and their use is rapidly decreasing.

As you know, everything in nature is interconnected. Depletion of the ozone layer and, as a consequence, the deviation of a seemingly insignificant environment setting can lead to unpredictable and irreversible consequences for all living things.



#### Reduction of biodiversity

According to experts disappears annually 10-15 thousand varieties of organisms. This means that over the next 50 years will lose the planet, according to various estimates, between a quarter and half of its biological diversity. The depletion of the species composition of flora and fauna greatly reduces the stability of ecosystems and the biosphere as a whole, which also represents a serious threat to humanity. The reduction of biodiversity which avalanche acceleration. The less biodiversity of the planet, the worse the conditions of survival in it.

The Red Book of Russia as of the year 2000 listed 415 species of animals. The list of animals in recent years, has increased in half, and never ceases to grow.

Mankind as a species with a huge size and habitat leaves no suitable habitat for other species. It is necessary to increase the area of tennis of protected areas for the conservation of endangered, as well as strict regulation of the oil field and the extermination of valuable species.



## Extinct species:

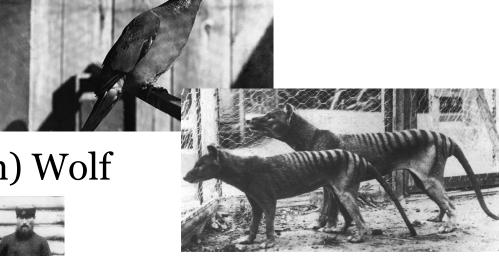
Passenger pigeon

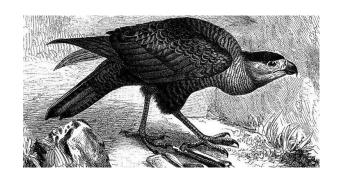
Marsupial (Tasmanian) Wolf

Tarpan



Guadalupe Caracara





#### Water pollution

Water pollution occurs throughout all of human history, people have used for centuries as a river any gutter. The greatest danger to the hydrosphere originated in the XX century with the advent of large multi-million cities and industrial development. Over the past decade, most of the rivers and lakes of the world has been turned into sewers and sewage lagoons. Despite billions of dollars in investment in wastewater treatment plants, which are able to prevent the transformation of a river or lake in the stinking muck, but are unable to return the water to its former natural purity: the increasing amount of industrial waste water and solid waste, dissolved in water, are stronger than the most powerful treatment units.

The risk of water contamination in the fact that man is largely composed of water, and to be a man, he must consume just water, which in most cities in the world is hardly drinkable. About half of the population in developing countries have no access to clean water, forced to drink contaminated with pathogenic microbes and thus is doomed to premature death from epidemic diseases.



#### Overpopulation

actually today, now humanity has passed all borders and features, which could be a planet to suffer. The Earth can not sustain such large numbers of people. According to the calculations of scientists, 500 thousand - is the maximum allowable number of people on our planet. Today, this figure exceeded the limit by 12 times, and is projected by 2100, scientists could increase almost the half. In this present human population of the Earth in the most part do not even think about what global harm carries a further increase in the number of people.

But the increase in the number of people - this increase in the use of natural resources, growth areas for agricultural and industrial needs, the growth of harmful emissions, increase the amount of household waste and their storage areas for growth in the intensity of the expansion of human nature and the growth rate of destruction of natural biodiversity.

Mankind today is simply obliged to keep its growth rate, to rethink their role in the planet's ecological systems, and to take up the construction of human civilization based on the friendly and meaningful existence, and not on the basis of the animal instincts of reproduction and Acquisitions



# The country's leaders in terms of population

- China
- India
- United States
- Indonesia
- Brazil
- Pakistan
- Bangladesh
- Nigeria
- Russia
- Japan

#### Oil pollution

Oil - natural oily flammable liquid, common in sedimentary shell of the Earth; important minerals. A complex mixture of alkanes, cycloalkanes and some arena and oxygen, sulfur and nitrogen compounds. Today oil as an energy resource is one of the main factors of economic development. However, oil production, transportation and processing it is invariably accompanied by her loss, emissions and discharges of hazardous substances, which is a consequence of environmental pollution. The scale and degree of toxicity of oil pollution is a planetary danger. Oil and oil products cause poisoning, the death of organisms and soil degradation. The natural self-purification of natural objects from oil pollution - a lengthy process especially at low temperatures. Enterprises Energy largest industrial source of environmental contaminants. They account for about 48% of emissions of harmful substances into the atmosphere, 27% of wastewater discharge, more than 30% of solid waste and up to 70% of total greenhouse gas emissions.



#### Land degradation

Soil - the keeper of the fertility and life on Earth. To form its layer thickness of 1 cm must be 100 years. But it can be lost in just one season, thoughtless exploitation of the land by man. According to geologists, before people began to engage in agricultural activities, the river into the ocean each year demolished 9 billion. M of soil. With the assistance of a person, this figure increased to 25 billion. Tons per year. Everything becomes more dangerous phenomenon of soil erosion, as fertile soils in the world becomes smaller and it is vital to keep at least that there is at the moment, to prevent the disappearance of a single layer of the Earth's lithosphere, which can grow plants.

Under natural conditions, there are several reasons for soil erosion (weathering and leaching of topsoil layer), which are exacerbated by man. Millions of hectares of soil are lost

A man with his own hands the Earth's surface turns into a kind of Mars, forgetting that it is different from our planet one important detail: it is not and can not be life.



#### Waste

One of the problems facing humanity - is the problem of waste. At the present time, because of its size, it is particularly relevant. By making a particular product, we should take into account not only the customer benefits but also its impact on the environment during production and disposal. That is the question about the future have lost their consumer product quality is the main concern. Today, humanity has accumulated so much waste that seriously faced with the problem of disposal.

The nature annually receives more than 50 billion. M. Of waste energy, industrial, agricultural industries and the domestic sector, including the industry - more than 150 mln. Tons. The environment is thrown about 100 thousand. Man-made chemicals, including 15 thousand. require special attention.

All of these wastes are a source of pollution of the environment instead of being a source for the production of secondary products.



#### Do not make this land

