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ECOLOGICAL PROBLEMS OF AUSTRALIA

The idea of practicing any foreign language cannot be realized without having certain account of country-specific knowledge. Thus, students should get information about different spheres of native speakers' life. In this respect the theme of a detailed study of the English speaking country, whichever one prefers looks as a topical problem. Australia is the smallest continent on our planet, where 120 nationalities live. It is often called the Green Continent.

The Indian and Pacific oceans wash Australia. It could be surprised to find out that the water around this continent is the very place where whales give birth their babies. Australia has eucalyptus forests. In the dry areas strange bottle trees, which keep water in their trunks, grow [1]. Australian continent really looks like a paradise. But this part of world could not avoid a number of ecological troubles other parts face with nowadays. The analysis of theoretical material makes it possible for us to differentiate some of the most vitally important of them: *soil erosion, disruption of natural nutrient cycles, water supply*; and to underscore the importance of their solving as well.

Soil loss resulting from wind or water erosion is a major ecological problem in many parts of the world today, especially in Australia. It is largely the consequence of land being denuded of a protective cover of vegetation as a result of over-stocking with cattle or sheep or the widespread use of the plough and other cultivation implements in areas with shallow topsoil. It can also come about as a result of disruption of the soil surface in the construction of roads and buildings.

Soil erosion leads to greatly reduced bioproduction and reduced biodiversity. In Australia the wheat and sheep areas of New South Wales, for example, are subject to serious soil erosion [2].

Disruption of natural nutrient cycles is, in fact, of no less significance for environmentalists of Australia. In natural ecosystems there is continual recycling of nutrients involved in the processes of life, and the continued bioproduktivity of these systems is dependent on this cycling process.

Human activities can interfere with natural nutrient cycles by extracting nutrients from farmland in the form of food, and eventually disposing of them in organic waste, which is not returned to the farm-



land. Consequently, there is a progressive loss of key nutrients from food producing ecosystems. Serious soil erosion resulting from poor farming practice can also lead to permanent loss of nutrients.

At present, this problem is largely overcome by replacing the extracted nutrients with artificial fertilisers, like phosphorus and nitrogen from other sources. This, in turn, often builds up a high level of acidity in soils, which then requires neutralisation with lime. There are serious doubts about the long-term sustainability of these practices [2].

Speaking about environmental problems of Australia, we cannot but say about water supply. The matter is that the ecological sustainability of any community is dependent on an adequate and reliable supply of clean water. The rate of use of water in many Australian cities and townships is unnecessarily high, and serious water shortages are likely in the future. It is clear that measures that are more effective aim to reduce the rate of consumption. These will include steps to minimize wastage of water, and recycling of grey water for purposes other than drinking. Over the past fifty years Australian water supply authorities have had to use an increasing number filters chemicals and treatments to counter the deteriorating quality of water from reservoirs [2].

We think this overview has summarised the major human-induced ecological issues encountered in Australia now – ranging from local causes for concern through to some issues of global significance.

The causes of the current ecological unsustainability of human societies across the world, including Australia, need also to be considered at a more general level. It is clear, for example, that a major factor is the sheer scale of human activities and their impacts. There are two underlying causes of this:

1. The number of humans now living on our planet – There are now about 1000 times as many people on the Earth as there were when some of our ancestors started farming, around 450 generations ago. Most of the increase in population has occurred since the beginning of the industrial transition, some eight generations ago. Since that time over 5000 million people have been added to the global human population, bringing the present total to well over 6000 million. This change inevitably means a colossal impact on agricultural ecosystems.

2. Changes in patterns of human activity – a major trend with widespread ecological repercussions has been the massive intensification of industrial activities over the past few generations, involving



enormous increases in the rate of use of resources and energy and production of technological wastes. This change has so far mainly occurred in the developed nations and is associated with intense consumerism and increase in material standard of living. The amount of carbon dioxide produced by the human population every day, for example, is about 12 000 times what it was when farming began. One tenth of this increase is directly the result of the growth in population, while the rest is due mainly to the use of fossil fuels in manufacturing, transportation and the production of electricity.

Thus, in our opinion, the conclusion of the given article can be twofold. On the one hand, it is too difficult in our days to make people understand that they must take care of nature and the lands they live on. We think, the solution of ecological problems in Australia is to find another ways of using natural resources and make human activity safer for animals, plants and lands. On the other hand, getting knowledge on the problem in the language of native-speakers not only familiarizes a person with it, but encourages him to master this language, to know more about the country and people, who live in it.

REFERENCES

1. Environment of Australia [Электронный ресурс]. – Режим доступа : <http://en.wikipedia.org>. – Назва з екрана.
2. Ecological issues in Australia today [Электронный ресурс]. – Режим доступа: <http://www.biosensitivefutures.org.au>. – Назва з екрана.

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PRIMARY SCHOOL AGE AND FEATURES OF ECOLOGICAL CULTURE

The natural environment encompasses all living beings and non-living things occurring naturally on the Earth or some region thereof. It actualizes such phenomenon as ecological culture as culture of all human activities connected with knowledge, development and transformation of nature.

Ecological culture consists of knowledge and deep understanding of environmental standards, development of a sense of civic responsibility for the nature of environmental activities and direct participation in their implementation [1, c. 123].

Ecological culture is a part of world culture, which is characterised by deep and general awareness of the importance of contemporary environmental problems in the life, learning and development of