

THREATENING OF AIR ON THE MAGURSKI NATIONAL PARK IN THE AWARENESS OF THE LOCAL SOCIETY

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Abstract

In the article a history of creating Magurski National Park was described. A state of the ecological awareness of young people dwelling lands of the Park was presented. A very low level of the awareness of the young generation was stated.

Key words: national park, threatening of air, the ecological awareness.

1 Introduction

Admission gradations of harmful insects, appearing of pathogenic mushrooms and abnormal weather conditions have always been natural factors threatening the health condition of forests. As a result of anthropogenic activity an additional group of factors threatening forests appeared. They are emissions into air of bulks of harmful substances, causing damage or dying out of assimilatory apparatus of trees. They recognize most dangerous: sulphur dioxide, nitric oxides, fluorine and dusts. Many villages are situated in a neighbourhood of Magurski National Park whom inhabitants have influence on the state of air in this region. The conscious man is only feeling responsible for the state of the natural environment. The person about the high ecological awareness notices, that the nature is essential for our surviving and at the same time we so much depend on it.

2 Characteristics of Magurski National Park

Magurski National Park is on the south of Poland between the Pieniny Mountains National Park and the Bieszczady Mountains National Park (fig. 1, 2). The park was created on 24 November 1994 on the government order. The seat is in the New Żmigród [4]. More over 99% surfaces of MNP are in one complex. Exact geodetic measurements allowed to establish the real surface of the park (19400 ha). The forest surface amounts to 18600 ha, nonforest surface 830 ha and water 38 ha [2].



Fig. 1: The map of Poland with Magurski National Park [5].

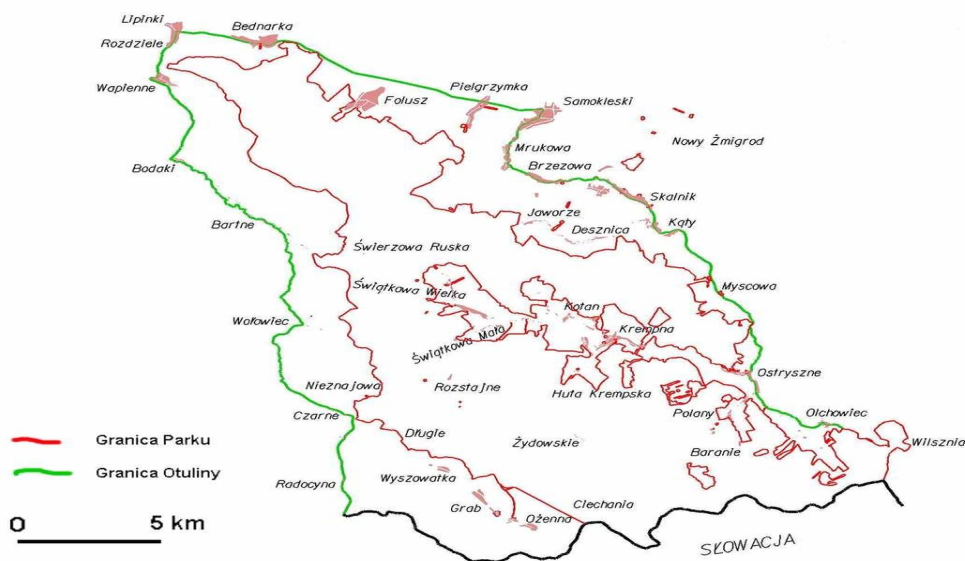


Fig. 2: *The map of Magurski National Park [5].*

Before MNP creating Beskid niski Mountains wasn't represented by the protected area of the high rank. In borders of the park a representative fragment was with the best kept fauna and flora. MNP area put in the transitional zone with intersection of eco-friendly corridors between the Eastern and Western Carpatian. It gives MNP a lot of geographical various components of the flora and the fauna specific character.

In frames of creating the European Network of Protected Areas “Nature 2000” Magurski National Park was proposed as special protective area of settlements about the name Anchor Magura (Code: PLH 18001). Settlements taken away in the Union Directive are filling 74% surfaces of the park [3].

On the area of Magurski National Park the Regional Inspectorate of the Environmental Protection is conducting measurements of nitrogen dioxide and sulphur dioxide with passive method. Results for MNP from years 2004-2007 show the increased concentration of pollutants of air, with regard to standard value determined for national parks. Seasonal character of the disintegration of value of concentrations, where the condensation of the carbon dioxide grew rapidly in winter months, is attesting to the influence of low emission. Moreover relating to different parks of the southern part of Poland air in MNP very much is polluted with sulphur dioxide.

3 Empirical research

An assessment of the ecological awareness of the local society is a purpose of studies carried out. Conducting a survey, we tried to get the answer to a question, what is influence to the air pollution of inhabitants of villages on the MPN area.

Recherches were carried out in June of 2008 amongst 121 pupils of schools on the area of the New Żmigród. The level of education and the age are diverse, therefore you should take it into consideration at analysing results. An examined trial is pupils of classes at different schools. It was among respondents: 41 pupils of the sixth classes of the primary school, 42 pupils of the third classes of the secondary school and 38 pupils of the second classes of the grammar school. We don't have reservations about the

representative nature of the group. All respondents came from small towns, being in the vicinity of Magurski National Park.

The questionnaire form of the questionnaire form contains questions referring to pollutants of air. Questions of disjunctive character were applied, conjunctive and alternative as well.

4 The review of findings

Filtering question was: are you interested in problems of the threat and the environmental protection? Pupils of the secondary school are demonstrating the interest hundred per cent, a little bit smaller pupils of the primary school (95%), however at the secondary school only 86% respondents are interested in problems of the threat and the environmental protection. We set respondents also a test question: who is responsible for the environmental protection? The large majority of respondents answered „everyone”, and the most (93%) emphasized at the secondary school, at the primary school 90%, at grammar school 87%.

Respondents were asked for the application, what way they could influence for improving the quality of air. Amongst a few given proposals, at the primary school enjoyed the greatest popularity as many as 47% pointed for using the bicycle in transit to/from the school (54%), 37% pointed for heating the house with exploiting renewable sources of energy, however 27% saving the electric energy chose. Amongst a few given proposals, at the secondary school using the bicycle in transit to/from the school enjoyed the greatest popularity (40%), 38% pointed for alternative warming the house, however 36% pointed at the energy saving. 10% respondents suggested different ways, among others not-littering. At the grammar school as many as 47% respondents pointed for using renewable sources in heating purposes.

The more older respondents, the greater awareness of the change of the quality of air in the sequence of the year. At the primary school 37% respondents answered, that the quality of air depended on the season, 37% had no idea, 27% answered, that it didn't depend on the season. At the secondary school 71% respondents stated, that the quality of air didn't depend on the season. At the primary school 67% respondents recognised, that in the winter the quality of air was worst (at the secondary school of 37% respondents, at secondary school 40%).

61% respondents at the primary school didn't have the formed opinion about relations between the number of the worn out energy and pollutant airs. Not better the situation looks at the secondary school (66%).

For heating houses coal and wood are a main applied type of fuel. Over 70% respondents at all schools are declaring, that they didn't burn waste in house stoves.

The influence of pollutants of air on plants according to respondents looks as follows: 59% recognised, that dying out of forests, damage to leaves and needles 39%, however 12% pointed to the intense height of plants.

Analysis presented in the above text of the statement of pupils of the sixth classes of the primary school, the third classes of the secondary school, and of the second classes of the secondary school shows us, what is possible to expect of every statistical Polish pupil. The state of the ecological knowledge in the primary school is developing on the similar level. The majority of pupils is interested in problems of the threat and the environmental protection, it relatively few it recognised winter months as the period about the most polluted air. The majority is declaring heating the house with coal and wood, and only few are burning waste.

5 Conclusions

Making analysis of turning respondents towards matters of pollutants of air, it is possible to state, that activity of the local population is posing a threat to Magurski National Park. In the park many protected species of plants and animals, who require practical appropriate conditions and clear atmosphere. The air pollution from anthropogenic sources is a great threat, therefore environmental educating present and future generations is important.

6 Literature

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