

## **EDUCATION, PUBLIC AWARENESS AND TRAINING IN RUSSIA**

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**Keywords:** ecology, education, high schools, average institutions, special educational institutions, comprehensive schools, preschool, public awareness, training, libraries, museums, reserves, public ecological organizations, mass media.

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### **1. Historical, social and legal aspects of ecological education in Russia**

Study, preservation and use of the huge riches of nature of Russia had already begun early in the history of Russian science in the eighteenth century, during the reforms of Peter I and Ekaterine II, when the Academy of Sciences in St. Petersburg was created in 1724, Moscow University in 1755, and the national schools in 1786. Nature was the subject of attention of several Russian scientists, e.g. M.V. Lomonosov, P.S. Pallas, I.G. Gmelin, F.A. Ignatyev, A.N. Krasnov, K.M. Baer, D.S. Pryanishnikov, V.I. Vernadsky, and L.S. Berg. They invested a lot of time and organizational resources in scientific expeditions for the study and ordering of nature's riches. In 1915 the V.I. Vernadsky Commission on Natural Productive Forces of Russia was created, with the purpose of ordering knowledge about the natural resources of Russia.

The beauty of Russian nature was a source of inspiration to poets (A.S. Poushkin, M.Y. Lermontov, A.N. Fet, N.A. Nekrasov, F.I. Tiutchev, S.A. Yesenin) and writers (N.W. Gogol, L.N. Tolstoy, I.S. Aksakov, etc.). Their works have not lost their meaning today, and can serve sources of ecological education. Their works are of great value in recording the history of many of the people of Russia, and their unique knowledge of nature and methods of utilizing it in various natural biotopes—mountains, woods, tundra, steppe and desert.

One of the first institutions of Russia devoted to tasks of propagation of ideas about protection of nature, was WOOP (All-Union Society for Protection of Nature), which

was created in 1924. In its charter there was specific mention of propagation of ideas on protection of nature. The first years of the USSR saw the growth of a public movement known as “land-researchers”. Unfortunately, after 30 years the movement was actually destroyed, and the activities of WOOP were put under the rigid control of the state. Such concepts as “ecology”, and “ecological problems” came into common use no earlier than the 1960s. Regular ecological education in this period did not exist.

At the end of the 1960s, in particular after the publications of the reports of the “Club of Roman”, there was worldwide growing interest in ecological problems and heightened demand for better quality information. In 1970 at a conference organized by the International Union for the Conservation of Nature (IUCN), the concept “ecological education” entered into scientific uses. In 1972 the Stockholm Conference on the Human Environment saw the development of a foundation and definition of directions for the development of environmental education. The First Intergovernmental conference on environmental education, organized by UNESCO in cooperation with UNEP in Tbilisi, 1977, laid down principles and recommendations for realization of national policies in this area. Among the rules accepted at this conference was the intention that “environmental education should play a role as catalyst or general denominator during updating modern training”.

Until the 1980s the ecological problematic in USSR was under the rigid control of official censorship and information was poorly accessible to wide circles of the population. The problems of protection of nature were highlighted in special departmental scientific magazines connected with forestry and fisheries. Difficult questions concerned with the destructive influence of military and industrial complexes as regards human health, and their impact on nature, were kept secret. A small number of popular scientific magazines, such as “Priroda” (Nature), “Znanie-sila” (Knowledge is Force), “Khimia i Zhizn” (Chemistry and Life), “Nauka i Zhizn” (Science and Life), and “Yunyi Naturalist” (Young Naturalist), only mentioned ecological problems in passing. Major ecological issues were discussed also in lectures and brochures of the All-Union society “Znanie” (Knowledge), but their quantity and contents could not satisfy the demand of the population for ecological education.

The sharp growth of interest in ecological issues in Russia was partly caused by the consequences of the explosion at the Chernobyl atomic power station in 1986. At the same time the new policy of “perestroika” (“reorganization”) opened new opportunities for disseminating information to the public on ecological problems. An independent ecological movement began to develop. There were sharp discussions in the press, resulting in concrete decisions from government, in the field of ecology. Attempts were made to order and coordinate the efforts of various groups concerned with environmental education. On behalf of the government of USSR, the complex program “Education in the field of environmental protection in the thirteenth five-year plan and on the prospect until 2005” was created, and also a number of departmental and author programs on organization and development of continuous ecological education. These programs were discussed in scientific circles, but for financial reasons were not realized.

The questions of ecological education were discussed at national conferences held in Ivanovo (1984) and Kazan (1990). At the International Congress of UNESCO and

UNEP in the field of education and training of environmental personnel (Moscow, 1987) an international strategy for education in the environmental field was accepted. In 1991 the “Law of the Russian Federation on Protection of Natural Environment” was approved. This determined a request for workers in the sphere of ecology to have professional ecological training (clause 75). The UN Conference on Environment and Development (Rio de Janeiro, 1992) laid down the precise formulations of tasks in ecological education, as a major factor of sustainable development for all countries. These basic tasks were as follows:

- maintenance of ecological education for all people;
- inclusion of ecological education in all educational programs with analysis of the reasons for basic ecological problems;
- involving school children in local and regional research on environmental conditions;
- development of educational programs for graduates of schools and universities, to help them live sustainably;
- encouragement of activity of all sectors of a society in training of personnel in the field of ecological education and rational use of environmental resources;
- use of mass media for resolving problems of ecological education, and
- use of the experience of radical peoples in education and training of personnel.

The formation of a uniform system of ecological education in Russia, based on the legislation, support of the state and public movements, happened in the mid 1990s. An important role in this system was played by the State Scientific Technical Program “Ecology of Russia” (1992) and the Federal Program “Ecological Safety in Russia” (1994 to 1995), in which the principles of association of the efforts of various bodies—state authority, nature protection, educational and public organizations, establishments of culture, sports and tourism, scientific establishments, mass media, labor collectives and professional unions—were formulated. In early 1994 the Ministry of Ecology of Russia and the Ministry of Education of Russia jointly established the basic tasks in creation of a system of complex continuous ecological education. The importance of ecological education was set down in the following regulations:

- Constitution of the Russian Federation
- Law of the Russian Federation on “Protection of Natural Environment”;
- Decree of the President of the Russian Federation on 04.02.94 № 236 “On the strategy of the Russian Federation on protection of environment and maintenance of sustainable development”.

According to the decision of the government of the Russian Federation on November 3, 1994 № 1208 "About measures on improvement of ecological education of the population" an inter-departmental commission was established to develop a state strategy of ecological education and a program for its realization, under the direction of the Minister for Environmental Protection and Natural Resources. The strategy had to supply the necessary conditions for development of the system of ecological education including:

- a legal base;

- a control system;
- a system of information support;
- scientific and methodical maintenance;
- personnel maintenance;
- support of state and public structures in the field of ecological education, and
- a monitoring system for the efficiency of ecological education.

Until 1993 professional specialists in ecology basically used a training course "Environmental protection of environment and rational use of natural resources", and a few other more specialized subjects. In 1994 the number of such experts was about 500. Since then a number of new specialties have appeared, and the training of experts will include these.

In 1994 at the Second International Scientific Congress "ECOLOGY of RUSSIA" (Moscow) there was a specialized section "Ecology and education". At the All-Russia Congress on Protection of Nature (Moscow, 1995) the problems of ecological education were submitted in a special session and the reference to all citizens of Russia, political parties and associations was accepted. It was emphasized that a task of vital importance was "ecologization" of public consciousness. In the State report "on the condition of the natural environment in the Russian Federation in 1995" It was ascertained, that the period of scientifically proved concepts and rules determining the role of ecological education, in a system of measures on maintenance of national safety, was finished.

During 1994 to 1996 the basic normative documents were drawn up regulating primary, secondary, higher and further professional, ecological education. Early in 1996 the Federal Law of Russian Federation "On modification and additions to the Law of the Russian Federation on education" was authorized. The decree of the President of the Russian Federation on 01.04.96, № 440, "On the Concept of transition of the Russian Federation to sustainable development" laid down the rules about the important role of ecological education in realization of this concept. In 1996 the federal target program "Ecological education of the population of Russia" was developed. The period of formation of the scientific and methodological base was finished in the field of ecological education.

## **2. Ecological education in state educational institutions**

The Russian Federation has a large network of educational institutions uniting more than 160 000 educational entities. About 7 million children attend pre-school units, and more than 20 million attend general schools. There are 8200 establishments of further education with more than 6 million children and teenagers. In the country there are 4200 educational institutions providing initial vocational training (with 1.7 million pupils), 2600 providing special education (2.1 million pupils), 535 higher educational institutions (2.6 million students), more 1000 branch and regional institutes, centers and courses for improvement of qualifications (more than 2 million pupils). All these educational institutions should become sources of wide ecological education of the population. Pedagogical and scientific potential in this sphere covers about 6 million pupils. To this it is necessary to add more than 1000 public ecological organizations conducting broad educational work among the public.

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### **Bibliography**

- Belov I. and Fomitcev S. The Green Bibliography. The periodic ecological editions of Northern Eurasia. Nizhnii Novgorod., 1996.(In Russian)
- Fomitchev S. Multi-coloured green. Nizhnii Novgorod., 1997. (In Russian)
- Mamedov. M. 1996.Ecological education: the concepts and methodical approaches. (In Russian)
- Moiseev N. 1996. Ecology and education. (In Russian)
- Samotesov E. and RybalskyM. 1997.Professional ecological education in Russia: the directory. (In Russian)
- Ursul A. 1998. Transition of Russia to steady development. Noospheric strategy. 1998.(In Russian)

### **Biographical Sketch**

**Boris Rezhabek** was born in 1939. He graduated in 1960 in the faculty of physics at Rostov University. In 1972 he was awarded his doctor of sciences in biophysics. He conducted teaching and scientific work in the biological and physical faculties at Rostov State University. He developed a number of original educational programs: Biophysics, Biological Cybernetics, Introduction to Cybernetics, etc.). He has prepared more than 120 experts in the field of biophysics and biological cybernetics.

The author has had more than one hundred publications, including a textbook for universities "Biological Cybernetics" and a monograph "Electromagnetic Fields in the Biosphere". He has been a participant of many conferences and congresses on biophysics, biological cybernetics and ecology.

Since 1989 he has been chairman of governors of the North-Caucasian inter-regional branch of Ecological Fund USSR, (which became, in 1992, the International Ecological Fund).

Since 1994 he has been a member of the Council of the Russian Physical Society.

Since 1995 he has been a member of the Foreign Policy Association, and the expert group for "Green Pages of Russia".

Since 1996 he has been a member of the International Academy of Ecology and Life Protection Sciences (IAELPS), and a member of the Council of the Don branch of IAELPS.

Since 1999 he has been President of the Don branch of the Russian Academy of National Property.

**Area of Scientific Interest:** Ecology; biological and medical cybernetics; study of principles of organization of systems in the biosphere.

**Areas of Scientific Organizational Activity:** Search, expert estimation and investment support of a wide spectrum in "noospheric technologies" in the fields of ecology, power, computer science, biotechnologies, and education. Creation of new forms of organization of scientific activity (Institute of Noospheric Research and Investigation).