

The Volga-Kama Nature Preserve (Zapovednik) Needs Help

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Tatarstan, an autonomous republic within the new Russian Federated Republic, contains several natural protected areas. By far the most important of these is the Volga-Kama Nature Preserve (Zapovednik), established in 1960 to preserve and protect floral and faunal species within its boundaries. It was strategically placed as well (see Figure 1 from previous article) to monitor general environmental changes in Tatarstan and to "act as a living laboratory for the study of processes determining the natural productivity of each element in the native natural complex," as its founding decree noted. Since 1991 the governments of Tatarstan and Russia have attempted to maintain this significant natural treasure.

Located near Kazan at the Great Bend of the Volga River, the *zapovednik* consists of two sections: Raifa, about 40 kilometers northwest of the city, and Saraly, on a peninsula formed by the confluence of the Volga and the Kama Rivers, about 65 kilometers almost directly south of Kazan. Together both sections cover about 7,600 hectares of land.

The decree establishing the preserve excludes from it all economic activity, as was to be the case for all *zapovedniki*. Theoretically, this "forbidden area" was to be open only to its staff and specifically invited guests, such as faculty and students from nearby universities and institutes who might perform field practice and scientific study within it. For many years the Faculty of Ecology of Kazan State University has had a special relationship with the *zapovednik*.

Graduate students and faculty from Kazan State University, along with scientific workers employed by the *zapovednik*, have continuously carried out research projects on it and recorded in its *Chronicle of Nature* the results of their field studies and environmental monitoring. Indeed, the faculty of

the university have trained many of the scientific employees of the preserve, including its current director.

Ecosystems on the two sections of the preserve are quite distinct, though they share many of the flora and fauna to be found throughout Tatarstan. The Raifa section, located on one of the ancient terraces of the Volga River, has valuable concentrations of forest vegetation and fauna of three overlapping zones: taiga (classical many-storied coniferous pine and spruce), mixed steppe, and broadleaf. The last large ancient stand of European pine in Tatarstan is to be found in Raifa. Other parts of Tatarstan have been cut over many times in the last five or six centuries of human habitation. The preserve is now surrounded by urban development, agricultural enterprises, and industrial enterprises, which more or less constantly threaten its environmental integrity.

The Saraly section of the preserve juts out into the Kuybyshev Sea, the largest body of impounded water in the Volga cascade of reservoirs. It contains mostly forest-steppe and terraced pine-flat ecosystems. More isolated from human activity than the Raifa section, Saraly is directly subject nonetheless to "reservoir problems," as it is located directly on the low east bank of this large stretch of water. Water pollution affects fish populations and other species of its near-shore ecosystems. And ocean-like storms continuously erode its banks on the Volga and Kama sides. Over time the Saraly section "may dissolve like candy in a child's mouth," as one of its scientific workers observed.

By law both sections of the preserve are specifically enjoined to protect faunal species, listed in the *Red Book of Endangered Species of Tatarstan*. Under special protection are elk (moose), marten, hare, squirrel, ermine, desman, capercaillie, black grouse, haze grouse, willow ptarmigan, and white-tailed sea eagle. Many endangered floral and faunal species of Tatarstan are now found only in the Volga-Kama Zapovednik and in other small special preserves. Environmental pollution and poaching continuously threaten these precious species.

Current economic and political problems in Tatarstan and Russia now seriously undermines the protective mission of and the ongoing scientific work in the *zapovednik*. Nominally, the State Committee of the Environment of the Russian Republic still has jurisdiction over the preserve. This federal agency, however, is currently very weak politically and thus able to give the preserve no more than "paper protection." Since 1991 federal agencies have cut the budget of the preserve by almost 90%.

The weak and financially poor Ministry of Nature of Tatarstan offers some political support, but cannot afford to fill the budgetary gap left by withdrawal or withholding of federal funds. Nor at present are the federal or republic agencies responsible for enforcing laws willing or able to prosecute environmental offenders. And bureaucrats at all levels of responsibility are subject to bribes from and intimidation by powerful political interests and economic enterprises.

The Volga-Kama Nature Preserve is now so poor, in fact, that it cannot pay its staff regularly. Nor can it afford to buy needed scientific equipment or boats and vehicles necessary to patrol the preserve. Many competent scientific workers have left the employment of the preserve. The remaining staff regularly keep their own gardens and, cannibalize preserve buildings to keep others in repair, and scavenge potatoes and other vegetables from nearby agricultural fields after mechanical pickers have gone through.

Chronic financial problems in Tatarstan encourage farmers and city dwellers near the Raifa section to poach endangered species and invade the preserve for other scarce resources. Recently, the administration of the preserve had to lay off scientific workers so that it could hire more rangers to protect the plants and animals on the preserve from poachers and human scavengers. Poaching decreased in 1998, but valuable scientific investigations of endangered species and environmental monitoring could not be done. Poaching is less a problem on the Saraly section because it is further away from urban centers, but poachers still come there by boat.

Agricultural enterprises near both sections of the preserve frequently graze their livestock in the buffer zones of the preserve and allow cats and dogs to prey on birds and other small animals in the preserve. Many surrounding farming enterprises, with the support of local political officials, complain that the preserve "locks up" needed resources.

The Ministry of Nature Protection of Tatarstan, prompted by the preserve staff and faculty of Kazan State University, have tried to expand its buffer zones in order to protect the preserve. Surrounding agricultural enterprises and local officials who support

them, however, have fiercely resisted this policy. Simultaneously, local administrations all over Tatarstan have opposed the expansion of existing and the creation of new protected areas.

The Volga-Kama Preserve needs immediate financial and political support to carry out its tasks of scientific investigation and nature protection. Its staff might sponsor some form of limited eco-tourism to bring in foreign money. Students and faculty of nearby institutions of higher learning volunteer to work in the preserve and to do needed research and monitoring, but they can only fulfill the needs of the preserve in

the short term. Federal and republic agencies must restore former funding levels.

Perhaps with the help of volunteers, the staff should carry out a more aggressive policy of educating neighboring communities and enterprises about the long-term societal benefits of protecting this natural jewel in their midst. If something is not done soon, Tatarstan will lose many of its most unique and characteristic plants and animals.

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