

Unique Internationally-Significant Ecosystems of Kamchatka: Linking Tourism and Conservation

A. Zavadskaya^{1,2}, V. Yablokov², V. Sazhina²

¹Kronotsky State Natural Biosphere Preserve, Kamchatka, Russia; ²Lomonosov Moscow State University, Moscow, Russia

The Kamchatka peninsula has a high concentration of unique conservation objects, but also a rapidly developing ecotourism system. The values of natural recreational resources of Kamchatka are inextricably linked to their naturalness, but the most popular tourist objects have extremely fragile (geothermal, tundra and alpine) ecosystems.

The growth of tourist stream occurs in conditions of absence of effective tools and programs for recreation management and planning both on regional and local levels. Therefore nowadays park managers are faced with the problem of recreational impacts displaying in the loss of vegetation, soil erosion, associated aesthetic degradation, and, finally, destruction of Red-listed species' habitats and unique geothermal and mountain landscapes.

Overall objective of our research is to secure the long-term future of the unique internationally-significant Kamchatka ecosystems by providing effective management tools and raising the level of environmental awareness of local communities and stakeholders. The paper presents the results of the PhD research, conducted in Moscow State University in 2008-2011 and of the project "Conservation of Unique Ecosystems for Ecotourism in Kamchatka, Russia", supported by Conservation Leadership Programme (project ID 0454611).

In our work we adopted an interdisciplinary approach, using qualitative and quantitative research methods drawn from the environmental and social sciences.

For studying recreational resource impacts, ecological factors and limitations of tourism development in the region we developed a multiparameter environmental assessment system and tested it in the model area – Kronotsky State Natural Biosphere Preserve.

For receiving information about social limitations of tourism development and finding trade-offs between conservation and resource use a series of sociological surveys (for visitors of PAs, residents of the region, tour operators, PAs staff and government) was conducted.

Standard statistical packages (SPSS, MS Access, MS Excel) and ArcGIS have been used to analyze and integrate all the collected data.

The key outcome of the work is creating the science-based framework and series of maps for sustainable tourism development in Kamchatka, which can provide both unique ecosystems' conservation and benefits for local communities.

Other outcomes of the research are:

- proposing and justifying environmental indicators for durability of ecosystems to recreational impacts and social indicators of sustainable tourism development;
- indicating hotspots of recreational impacts and areas of potential resource use conflicts in the region;
- proposing recreational zoning based on the assessment of recreational potential and detected social and environmental limitations of tourism development;
- finding model environmental and social indicators for long-term recreation monitoring in PAs of Kamchatka and developing monitoring programs, providing information on assessment of the state of conservation resources, the severity of threats and success in management responses;
- receiving a picture of local communities' attitudes towards PAs, and detecting the ways of their involvement into nature conservation and tourism development.

The findings of our research illustrate the importance of basing conservation programs in vulnerable ecosystems of Kamchatka on knowledge about both resource impacts and communities' attitudes towards conservation issues, and emphasize the necessity of adopting of sustainable tourism framework to the practice of decision-making.