

Protecting Ecotourism Resources in a Time of Rapid Economic and Environmental Transformation in Asia

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Abstract In the Far East of Russia, similar to many places in Asia, ecotourism and the environment are in transition. A science team, cooperating with the United Nations Development Programme project "Demonstrating Sustainable Conservation of Biological Diversity in Four Protected Territories in the Kamchatka Region, Russian Federation," is working to provide vital information to help guide regional sustainable development planning in a time of rapid change in globalization and visitation pressures. An emerging part of Russian society has been the managers in Russian industry that receive high wages and demonstrate increased interest in travel and tourism within Russia and across Europe. Consumers have been reporting very low debt and new growth in the economy has been anticipated. Russians have very unique but evolving leisure patterns, with a long tradition of nature-based activities near home, including hiking, cross-country skiing, viewing nature, and relaxing at spas or dachas. The Kamchatka Peninsula is emerging as a nature-based vacation destination with federal and regional protected areas in the region attracting and hosting a growing number of Russian and international tourists. A cooperative study was initiated in 2007 to better understand the visitation and economics aspects of sustainable tourism development in Kamchatka over a one-year period. A survey of 1,961 tourist visitors to Kamchatka revealed nearly two-thirds of Kamchatka visitors were from Russia, followed by Germany, the U. S., and France. In economic contribution terms, however, while in the minority among visitors, Non-Russian visitors reported over \$4,000 per trip in expenditures, excluding air or cruise ship fare to get to Kamchatka. Russian visitors, by far the majority, reported a much lower average of about \$1,500 per trip. Similar to recent changes in China and elsewhere in Asia, Russia is expecting continued economic gains with a potential significant rise in consumption and personal income. Current and anticipated spending patterns of discretionary income among Russians could greatly influence transition of this relatively low density frontier in Asian Russia.

Key words Russian Economy; Ecotourism; Travel; Discretionary Income; Protected Areas

1 Introduction

Today in the U. S., and around the world, Asia is in the news nearly every day. It is not only the national disasters of earthquakes, weather-related catastrophes, and human health and safety crises that bring Asia to the rest of the world so often. What happens in Asia each day has financial, homeland security, international diplomacy, subsistence and intellectual impacts on the world. China, for example, as the most populous nation on earth with over 1.3 billion people in

2007 and spread across 3.7 million square miles of the earth's surface has tremendous influence on the rest of the world. With a documented history of over 5000 years, it is now experiencing rapid change in many ways, along with much of Asia. The world is watching, partly out of concern for the people of China and Asia, and partly out of concern for themselves (Yang 2008).

Lewis & Xue (2003) described the transformation evident in China, the largest Asian country, in terms of three interlocking and mutually reinforcing changes: modernization, political reform and globalization, and these changes in turn have had profound influences on people's attitudes, their behaviors and their quality of life. Croucher (2004) has suggested that part of the reason behind China's rapid societal change is due to increasing recognition by the Chinese people of their interconnectedness with regional and international economic, social, technological, cultural, and ecological spheres. China's culture is being profoundly affected by globalization influences (Kymlicka 2005) and Tan (2005) projects that growing effects of western cultural orientations on all Asian countries will likely have profound effects on defining citizenship but with twists associated with different political systems, traditional and religious practices, and cultural identities (Yang 2008).

Throughout Asia, there is constant transition politically, environmentally, socially and economically that influences relationships with the natural world. As countries often move from developing to developed, attitudes and ethics change in regards to how people value nature, particularly scenic areas, those with high biodiversity, those crucial to maintaining human health or those that contain unusually scarce resources. As public lands managers and private entrepreneurs look for ways to develop and maintain viable operations in relatively intact natural systems, the focus is necessarily on economic contributions as well as environmental stability, or sustainability. Ecotourism is of growing interest as a way to maintain both, and in many places in Asia, the role of protected areas is changing very quickly.

2 Aspects of Ecotourism Sustainability

Kritger (2005) suggests that the contributions of ecotourism, or nature-based tourism, to both socioeconomic and environmental improvements is a relatively new focus of research dating from the 1990s. Sustainability of ecotourism, also an increasingly important topic of research in the 1990s, has often been focused on the difficult tradeoffs associated with conserving nature while contributing to the economy of needy populations. For an examination of ecotourism sustainability in Costa Rica, Aylward, Echeverria & Tosi (1996) focused on four aspects believed to be essential for sustainability: visitation, finance, ecology and economics.

This paper deals primarily with development of new knowledge about emerging ecotourism visitation patterns in Kamchatka, in the Russian Far East. Visitation, however, is obviously not independent of the other three essential aspects. Visitation to an area, or to specific protected areas, often exhibits transition over time, sometimes from no visitation to some tourist visitation, sometimes from visits by researchers initially to later visits by tourists (Aylward et al. 1996). In Kamchatka, only in the mid 1990s were some currently popular ecotourism areas opened up for visitation, with previous primary use focused on military training and resource extraction. Approximately 15,000 tourists are estimated to have visited Kamchatka in 1995, with about 4,000 of them foreign. Ecotourism visitation to Kamchatka is known to have increased in the early part of the 21st century, but very little is known about 1) where the tourists come from and 2) their response to things they see and do while in Kamchatka. The purpose of this report is primarily to address these two questions.

Finance of protected area management in Russia is largely a function of and heavily influenced by central political control over finances. Since 2000, the central government has been strengthening control over sub-national governments in Russia (Hanson 2007). This type of transition, according to Hanson (2007), though it provides some desirable national benefits, is often considered to be at the cost of more efficient management of public finances. While macroeconomic stability and providing a minimum real income for all segments of society are

believed to be among the positive benefits of such fiduciary policies, some local public goods might be more efficiently provided by sub-national government. Hanson (2007) included parks and protected areas within these local public goods that can conceivably benefit from at least regional, if not local control over financial management.

Sustainable financing of protected areas is a topic of interest in many nations, with fees paid to visit among the most attractive methods of accomplishing conservation and economic objectives (Watson 2001). Increasingly, visitor use fees are being charged and receipts are staying to benefit local, regional and even nationally protected areas, though compatibility between fees and some values of wild places have been called into question (Trainor & Norgaard 1999). Sustainability of ecotourism may be dependent upon sustainability of protected area administration agencies, whether controlled nationally or more locally, and in order to keep up with demand for facilities, services and transportation in previously low visitation areas, fees and more local control of financial investment are of great interest. It is not known how fees for access to protected areas would affect Russian visitor experiences in Kamchatka, or Russian visitor attitudes toward paying fees for access or to protect natural areas. Therefore, a secondary purpose of this project is to explore these attitudes.

Ecological sustainability can be heavily influenced by visitation levels and financial sustainability. Managing agencies bare the burden of planning and initiating travel planning activities such as development of trails, overnight accommodations, camping regulations, and other transportation access facilities. This development should be well based on decisions about resource protection objectives, desirable on-site experiences, and longer lasting beneficial outcomes of visitors and community residents. Overuse can cause reductions in experiential and environmental quality of protected areas, therefore close monitoring of physical and social impacts is often seen as crucial. Focus on visitation and the economy without proper attention paid to the physical aspects of protected areas can lead to irreversible negative effects. In some of the wildest places in Kamchatka there is very little knowledge accumulated about resource conditions and desired recreation settings, though managers and visitors have been known to express concern about uncontrolled development and visitor impacts. A third aspect of this project is aimed at describing the unique ecological conditions present in Kamchatka, exploring visitor attitudes toward the importance of protecting nature in Kamchatka, and obtaining their perception of how effective current management strategies are for this protection.

Economic benefits of protected areas are often both of the market and non-market varieties. Protection can provide many non-monetary benefits to local, regional, national and worldwide populations. A variety of non-market values flow from protection; from ecosystem services to subsistence uses and preservation to bequest values have been estimated for specific areas that have been protected from development and degradation. Short-term economic benefits are difficult to compare to perpetual, non-market value gains due to a collective decision to protect. However, a fourth aspect of this project is aimed at developing greater understanding of recent economic change in Russia through review of relevant literature and an initial exploration of the level of expenditures visitors make in Kamchatka to develop understanding of which sectors of the economy are likely influenced by short-term impacts.

On the market side, in Russia, small innovative enterprises (SIEs) are being hailed as an important force in economic recovery (Tovstiga, Den Hamer, Popova, Efimov, Moskaliev & Bortnik 2004) since initiation of a transformation from a socialist economy to a market economy (Frunat & Richet 2007). Russia's economy, however, is still largely based on extractive industries, with government budgets based 65 percent on energy receipts (Frunat and Richet 2007). Industry and service sectors are growing rapidly, with high hopes for success of small enterprises. Ecotourism outfitter and guide service companies, souvenir sales, food sales and adventure lodging all fit this category well, as does many other small businesses serving ecotourism visitors. In Kamchatka, these ecotourism businesses are believed to be very important for economic growth.

Russia, however, is believed to lack many of the skills it takes to be competitive in entrepreneurial and commercial pursuit of customers within the global market (Tovstiga et al. 2004). While Russia's share of global trade is currently described as negligible, President Putin's

economic policies were aimed at more integration. Tovstiga et al. (2004) cite additional problems with inefficient bureaucratic controls, insufficient competencies, and differences in culture and business practices, among currently recognized constraints to full emergence into the global market for these SIEs in Russia. With better understanding of the economic contributions of ecotourism, these constraints can better be addressed. Using a regional development index (sort of a per capita income mapping technique based on various socioeconomic variables describing aspects of education, environment and health), Giannias, Belokrilova, Shevchenko, Chepurko & Iakovlev (2000) placed Kamchatka Oblast in 55th place among 76 Russian regions.

3 Transition of Russian Society and the Economy

The flow of information about society in Russia has historically been controlled by the central government (Nikitin 2001). Care was often exercised to avoid inconsistency between political ideology and actual events and societal conditions. In the mid-1980s, according to Nikitin (2001), perestroika policies recognized the power of social research to inform transformation of Russian society. Initiation of a multi-party political system and major market reforms stimulated a new role for social knowledge in the transition of society and related economics.

With new focus on understanding social transition and change in the economy has come knowledge of erosion of economic security for many Russians (Fak 2005). Per capita income in Russia in 1992, at the beginning of a market economy, was worth only about 70 percent of the level of 1990 (Kharkova & Andreev 2000). Living standards of many families decreased and income inequality increased sharply, with an estimated one-third of Russia's people living below poverty in 1992 (CENBR 1998). By 1994, real income had fallen to 60 percent of the 1991 level (CENBR 1998). Russians are believed to fear uncertainty connected to the economy and nearly half describe their financial state as "poor" or "very poor" (Fak 2005). Following the government financial default in 1998, many Russians do not trust the government enough yet to feel secure in the economy, though it is believed that wages have been rising faster than gross domestic product growth and the unemployment rate has been reduced. According to Fak (2005), however, though the poor are really doing quite a bit better than before, they often witness extreme inequality due to observable growth in a very wealthy upper and middle class in Russia. A great deal of income is believed to not be reported in Russia, also, contributing to mistrust and insecurity about the economy. Goskomstat, Russia's state-run statistics agency reported in 2003 that 10% of high-income Russians shared nearly 30% of the total cash revenues during the first quarter of 2003. The gap between the rich and the poor in Russia seemed to be widening in 2003.

Mistrust also exists within the business sector. In 1996, Russia was ranked the 6th out of 54 countries surveyed in amount of perceived corruption in a study of perceptions by multinational corporations and institutions (Jaffe & Tsimerman 2005). With little concern for ethics in the transition to business development during the 1990s, the government urged development of new enterprises and entrepreneurship while they pursued increased privatization of industry (Ivancevich, DeFrank & Gregory 1992). This transition, highly fueled by motivations to jumpstart the economy, also paved the way for corruption, bribery and deception (Jaffe & Tsimerman 2005) in the private sector. The good news is that future managers are leaning toward more ethical behavior than that previously exhibited among managers in Russia (Jaffe & Tsimerman 2005). Currently there is advocacy within Russia of placing a greater emphasis on understanding the effects of encouragement of ethics in education and enforcement. Ethical principles in business are often thought to constitute one of the strongest forces for keeping a society healthy and growing (Silk 1989).

In 2004, Liesman (2004) reported a consumer boom in Russia that put some retail store sales up by 20% over 2003, and huge amounts of wealth being created by the free cash flow in post-Soviet Russia. At this time, however, this newfound discretionary income was mostly being spent on the latest electronics and foreign products. Low housing costs, the flow of oil dollars and reduced taxes all put cash in Russian pockets. In 2004, this report described discretionary income

as growing nine percent for each of the past three years, adjusted for inflation. And while most of this consumer spending increase was happening in the urban areas, the outer regions of Russia were acknowledged to be tremendous growth opportunities.

Many inequalities exist across regions in Russia. Hanson (2007) illustrates this inequality by describing a new report that estimated Moscow residents averaged 30 mobile phones per 100 people, while in the rest of the country that average was about 2 per 100 people. Thirty of the poorer regions (containing about 30 percent of the Russian population) regularly depend on transfers from the federal budget for half or more of their own budgetary revenue. In the Russian Far East, including Kamchatka, there was heavily subsidized state-sponsored industrial development during the Soviet era to derive benefits from natural resource exploitation (Mueller & Bradshaw 2006). The population increase during this era reversed with the collapse of the Soviet Union. Heleniak (2003), after examining the 2002 Russian census, reported declining fertility, increasing mortality, an aging population, slowing immigration and a general decline in the Russian population nationally. Interestingly, decreasing life expectancy in the post-Soviet era, often attributed to tumultuous transition in social, economic and political conditions, was more prominent in the more developed than the less developed regions (Zhang & Hwang 2007). Hanson (2007) concluded that the remote regions of Russia are heavily and unavoidable dependent on central funding and suggests increasing direct federal intervention.

The Kamchatka Oblast population decreased nearly by 22 percent from 1990 to 2002, from 426,733 to 333,644 people (Goskomstat Rossii 2004) and totals are expected to decrease by over 20 percent from 1998 to 2015 (Mueller & Bradshaw 2006). The Russian Far East is a cold area with temperatures in January ranging from -53 to -7°C (Mueller & Bradshaw 2006). So, not only change in national priorities for settlement and economic contributions influence settlement patterns, so does the weather. Mueller & Bradshaw (2006) suggest that to sustain people and local economies in the Far East of Russia can cost up to four times more than in the European parts of Russia. Hill & Gaddy (2003) demonstrated the relationship between temperature and sustainability of populations through a Temperature Per Capita Index (TPC). This index incorporated monthly average temperature for January into an index that demonstrates the relationship between maintenance costs and costs of adapting to the cold with potential profit of an economic operation. Unknown influences of climate change could change these current relationships.

4 Kamchatka: History of Protection and Major Features and Activities

An area occupied for thousands of years, the Kamchatka Peninsula became part of Russia in 1699. By the beginning of the 18th century, the Itel'meni people had settled in the central and southern parts of Kamchatka Peninsula, and depended on fishing for subsistence. Western Kamchatka and the Bystrinsky region were settled by the Eveni people, dependent on reindeer herding. Koryak people came from the north, and were also reindeer herders. These indigenous populations declined to 3,000 by 1995. Traditional economic activity is currently prohibited or limited to a few non-intensive forms, such as reindeer raising in Bystrinsky Nature Park and extremely limited winter hunting of fur animals in three parks. Recently, traditional land use areas have been zoned for permanent settlements in the northern part of the South Kamchatka Nature Park and in the Bystrinsky Nature Park (United Nations Environmental Programme 2002).

Until 1992, the peninsula was a closed military zone around the home base of the Russian Pacific submarine and main fishing fleets near the capital Petropavlovsk-Kamchatskiy (United Nations Environmental Programme 2002). This is the major city on the peninsula with most of the region's population, though experiencing rapid population decline, recording as much as a 27 percent decline between 1989 and 2002 (Mueller & Bradshaw 2006).

Kronotsky Federal Nature Biosphere Preserve is the only site in Russia with large geysers, enhancing its tourist potential. Approximately 3,000 tourists visit the Valley of the Geysers each year where a helipad and board-walk have been built and some measures taken to protect it from overuse by tourists (Krever 1994). There are ecological education centers in both Bystrinsky and

Nalychevo Nature Parks, as well as one in Tilichiki for the Koriyanskiy Federal Nature Reserve. Helicopter access to tourist cabins within Nalychevo Park and Southern Kamchatka Nature Reserves is available. Between 1993 and 1999 the Klyuchevskaya group averaged about 250–300 visitors a summer, 100 being foreigners, but it does not yet cater to many tourists. Projects to promote eco-tourism are now underway, partly to supplement reduced government funding.

Strict nature reserves were established by imperial decree in south Kamchatka as far back as 1882 to protect sable and sea otter populations. The Kronotsky Federal Nature Biosphere Preserve is 1,007,134 ha, and was originally established in 1934 to protect the sable population. Over time it has been closed then re-established and in 1982 a 3-mile ocean buffer zone was added. Over time, several additional nature reserves have been established with eventual World Heritage Site designation for 6 sites within Kamchatka. The Volcanoes of Kamchatka site includes 4,378,115 ha (MEPNR 1995). Bystrinsky Nature Park is 1,500,000 ha, South Kamchatka Nature Park is 860,000 ha, Klyuchevskoy Nature Park is 375,981 ha, Nalychevo Nature Park 265,000 ha, and South Kamchatka Federal Reserve is 247,000 ha (Newell 2004).

The Kamchatka Peninsula is one of the most active volcanic regions along the Pacific Ring of Fire. Over one hundred and fifty volcanoes stretch across this land mass, twenty-nine of which have currently active vents. Klyuchevskoy, one of the most active and renowned volcanoes in the world dominates Kamchatka's main cluster of volcanoes: the Kliuchi Group (United Nations Environment Program 2002). Large areas of the region are relatively wild and undeveloped. Poaching, according to Zwirn, Pinsky & Rahr (2005), is widespread in part due to high unemployment rates. Badly needed economic stimulation through oil and gas development is a strong potential and poses threats to the environment. Newell (2004) reported that ecotourism is thought of as the best opportunity for an environmentally sustainable industry employing a broad range of local people. To this date, however, tourism infrastructure is scarce or non-existent (Zwirn et al. 2005).

Kamchatka contains great species diversity, including the world's largest known variety of salmonoid fish and exceptional concentrations of sea otter, brown bear and Stellar's sea eagle. These areas are under mostly Federal control, under the jurisdiction of the Ministry of Natural Resources (MEPNR) since 2000, with some long-term lease concessions to tourist companies. Klyuchevskoy Nature Park is under both regional and federal jurisdictions as the land belongs to the State Forest Fund (Menshikov, Efimenko & Nikiforov 2000).

The volcanic area is also one of the most pristine parts of the peninsula. The Klyuchevskaya group is beautiful as well as dangerous. Most of Bystrinsky Nature Park in the Sredinny range is a mosaic of different mountain landscapes. Kronotsky Federal Nature Biosphere Preserve, near the north end of the eastern range, is famous for its scenery. Lake Kronotsky and Lake Kurilskoe (in the far south), are both very scenic and important fish spawning habitats. Nalychevo Nature Park, just north of the capital city, has vigorous glaciers and good hunting and fish spawning grounds. The South Kamchatka and South Kamchatka State Nature Parks encompass active glaciation, wild unpolluted rivers and a spectacular coastline with several islands, deltas and wide swampy estuaries (United Nations Environmental Programme 2002). The Koriyanskiy Federal Nature Preserve, located in the northeastern part of Kamchatka, was created in 1995, covering 327,000 ha, of which 83,000 ha are Bering Sea Waters. The main purpose of this vast and remote area is protection of massive bird migration resting areas and nesting grounds of waterfowl and shorebirds, large sea bird colonies, and marine mammal haul-out areas.

The peninsula being all but surrounded by sea has a moist, cool maritime climate moderated by the ocean. Central Kamchatka, enclosed between the two mountain ranges, has a climate similar to the continent, and is snow-covered from October to May. On the west coast, temperatures are lowered by the cold Sea of Okhotsk. The climate is windy, often foggy and subject to very heavy snowstorms. At sea level, the mean temperature in July is 12°C but can reach 20°C; the mean temperature range in January is -4°C to -10°C. The central valley becomes both warmer and colder than this. The rainfall is less than 400 mm in the centre of the peninsula, nearly 1,000 mm along the western coast and nearly 2500 mm in the southeast which is in the path of

monsoonal rains (Borodin & Syroechkovski 1983).

The total number of plant species is 1,168, with 10% endemic to Kamchatka (MEPNR 1995). Mammals in Klyuchevskoy Nature Park include a herd of wild reindeer, a large population of brown bears, east Siberian lynx, snow sheep, wolverine and ermine. Bystrinsky Nature Park includes Canadian beaver, collared lemming, black-capped marmot, muskrat, american mink, Kolymsky moose and large numbers of domesticated reindeer. Nalychevo Nature Park has 33 mammal species. The Kronotsky Federal Nature Biosphere Preserve has 60 mammal species, 900 bears and the largest population of wild reindeer in Kamchatka. It shares with the southern parks abundant marine life: Kamchatka crab, sea otter, sea lion, Kuril seal, spotted and ringed seals, Risso's dolphin, narwhal and walrus (MEPNR 1995).

At least 179 bird species have been recorded in Kamchatka. Kamchatka is a major point on migration routes and a wintering ground for a great number of eastern bird species. There are numerous seabird colonies along the coasts of the reserves, several of which contain a notable portion of the world's population of certain species. More than half the world populations of Steller's sea eagle and of Aleutian tern nest on the peninsula. Eagles are attracted by the sockeye salmon at Kurilskoye Lake, which is the largest spawning ground in the world for this species of salmon.

The rivers of western Kamchatka contain the greatest concentration and diversity of salmonoid fish species on earth and are the only place on the Pacific Rim where all the species of Pacific salmon coexist. Nearly all the rivers are exceptionally unpolluted spawning grounds for this key food source which sustains the very large populations of brown bears, sea otters, Steller's sea-eagles and dozens of other marine and terrestrial animals. Wild salmon are declining rapidly throughout their range along both the Atlantic and Pacific rims. Outside western Alaska, there are very few if any large areas left along the Pacific Rim to preserve not only native runs of salmon and steelhead, but also the intact ecosystems they support and that support them (MEPNR 1995).

Since the end of the Soviet Union, federal funding for protected areas in Kamchatka has decreased by 90% with drastic consequences for the parks. There are as a result two opposing options for the future development of Kamchatka: expanded extraction of minerals (largely on land traditionally held by the native people) to help finance the regional administration, and activities based on protecting the environment which may sustain native populations and create sustainable tourism. When the National Committee for Environmental Protection was abolished in 2000, environmental issues became the responsibility of the Regional Committees on Natural Resources, and the mining interests hostile to conservation in Kamchatka gained strength (Murashko 2001). The southern boundary of the Bystrinsky Nature Park has already been revised 50 km inwards to permit gold mining on its edge and there is pressure for nickel mining within the Park. The frequent fires in this park, a proposed new road which would expose the area to poaching, and the granting by local authorities of 12 out of 24 hunting leases to business interests from outside the region could not be monitored since the Park had no staff in 2001 (IUCN 2001). Logging and oil and gas extraction in the Sea of Okhotsk near the coast have also started and a gas pipeline with a road to Petropavlovsk is projected, crossing 20 salmon rivers. Geothermal exploitation is also developing at Nizhnekoshelevsky in the South Kamchatka Nature Park and Federal Reserve, an area earmarked for scientific work and regional monitoring. Any of these industrial activities might pollute salmon spawning grounds and begin to degrade wilderness conditions.

Human-set forest fires are also a constant threat. Illegal, highly organized campaigns of logging and poaching bears for gall-bladders and salmon for caviar; illegal sea fishing, uncontrolled commercial tourism with well-organized hunting from helicopters in the Geyser Valley; and general tourist littering, degradation and petrochemical and sewage pollution have all increased in recent years (Newell & Wilson, 1996). Geothermal and other rare flora are also disappearing. Management is drastically underfunded with too few personnel, with too little infrastructure, training or equipment. The public is economically challenged and lacks environmental awareness. There is no community involvement in management, and an inadequate legal and policy framework (Newell 2004). Park staffing and finance levels for all the reserves are under pressure.

5 The Challenge Today in Kamchatka

Within a context of increased recognition of world heritage significance of the protected areas in Kamchatka, decreased federal government support for protected area management, and a rapidly changing economy and economic policies, social science knowledge is acknowledged as important to guide further transition. Decisions about future development of ecotourism services and facilities should be governed by ethical consideration of various aspects of sustainability. Greater understanding of visitation, particularly who is visiting Kamchatka now and what they are doing during these visits, will be extremely helpful. Furthermore, understanding of how visitors feel about the role of the regional government and private use fees to cover the costs of both conservation and accommodating guests could be valuable in planning for sustainability of growth and protection. Gaining insight into current expenditure patterns of visitors and their perceptions of management effectiveness could be very valuable to small business entrepreneurs and government authorities.

6 Methods

Beginning in July 2007, and extending through mid-July of 2008, a sample of Kamchatka visitors were surveyed at Yelizovo Airport. This airport is the single largest portal for an estimated 40,000 visitors to the Kamchatka Peninsula per year. Fewer than 5 per cent of visitors enter through the cruise ship port and those visitors generally stay for less than one day. The sampling strategy was to administer an exit written survey of outbound airline passengers who wait for two to three hours in the comfortable terminal passenger waiting/security area. Passengers in the waiting area have checked through security, have checked their bags and have secured their seat location.

Trained interviewers intercepted travelers and inquired whether they were visitors to Kamchatka. If yes, the students introduced themselves and the survey goals and asked whether the visitor would participate. Respondents were given a pen as a small incentive. Surveys were printed in English and Russian. Resources provided the opportunity to hire 6 bilingual English/Russian student surveyors. Their time was divided in the following manner: 3/4 time interviewing at the airport, 1/4 time coding interviews and verification. For consistency, after one month data entry was limited to two individuals and the survey coordinator verified data entry.

Interviewers were instructed to pay close attention to the person being contacted in order to record non-responders' gender, approximate age and Russian/non-Russian status for a check for response bias. The data were saved to an internet-based server along with any comments external to the survey that interviewees provided. This method focused on good interviewer skills to make the first contact with visitors. Both Russian and international visitors required courteous attention because intercept surveys are relatively unusual in Russia.

Four to eight hour time blocks were selected to conduct the survey each day, depending on flight schedules. After 2 weeks, small early flights and late flights were eliminated from the sample because they were dominated by local destinations and found to contain 90%-100% Kamchatka residents. This methodology made it very likely that anyone traveling for tourism would be intercepted exiting Kamchatka on sample days. The sample was designed to intercept all visitors on every flight in the sampling period. The sampling population included all passengers, resident (Russia) travelers and non-resident (Non-Russian) travelers.

The survey targeted tourists and leisure travelers, some of whom may also be conducting business, in order to capture general leisure travel patterns in Kamchatka as well as to specific destinations such as Protected Areas. More information is needed on number of flights, average number of passengers per flight, and a better idea of the breakdown of traveler categories per flight, but our assumption is that we intercepted a representative sample of travelers. Two members of the US survey design team observed the students administering the survey and were satisfied that the students were intercepting nearly all visitors during the sampling blocks of time.

This method has advantages and disadvantages. We can accurately estimate percentages of

visitors to individual areas, their opinions, expectations and preferences. We are able to accurately estimate international and Russian distribution, average expenditures, and attitudes toward protection of natural areas. We can not report total expenditures by all tourists in a season because we do not know the exact proportion of visitors we sampled.

The survey administered was approximately 9 pages in length, with 131 potential data points per survey (or 38 total questions, some with multiple parts). Besides some very descriptive questions to provide a picture of visitor and visit characteristics, about six questions provided enough information to describe expenditure patterns of visitors, an extensive list of potential sites visited was used to find out where people went on their visits, and visitors were asked about their most enjoyable activities at their favorite places. Attitudinal questions consisted of disagreement (disagree and strongly disagree)/neutral/agreement (agree and strongly agree) responses related to potential fee policies, perceptions of statements about the importance of protecting natural areas and effectiveness of management policies to accomplish this protection. No summative scales were developed for this report, therefore all attitudinal scales were treated as ordinal measurement scales.

7 Results

The survey method selected required valued cooperation from airport security and managers, which was gratefully received. Over the one year study period, 3,374 individuals were contacted, from which we identified 810 traveling for business only, 443 were on a trip that combined business and vacation, and 1,518 were solely on vacation travel to Kamchatka (table 1). This provided a total of 1,961 usable surveys, with just less than a 1 percent refusal to participate (therefore, no test for response bias was conducted). Another 387 people were traveling to visit friends or relatives and yet another 216 more people indicated additional purposes of travel besides vacation or tourism purposes.

Table 1 Purpose of visit to Kamchatka

Purpose of visit	Number of responses	Proportion of responses
Business only	810	24.0
Business and vacation	443	13.1
Vacation	1,518	45.0
To visit friends or relatives	387	11.5
Other-not vacation-related	216	6.4
Total	3,374	100

8 Visitor Characteristics

Of those interviewed, nearly 70 per cent were male and about a quarter were female, with less than 5 percent not indicating gender. As somewhat expected, the majority (61.5 per cent) were from Russia and 38.5 per cent were non-Russian, with highest numbers from Germany and the U. S. (table 2). Very few visitors were from other Asian countries. While just over 60 per cent were 40 or under, another 35 per cent were between 40 and 60 years of age (table 3). Nearly two-thirds of those interviewed were on their first trip to Kamchatka, and only 8 per cent indicated they had visited Kamchatka more than 5 times.

Table 2 Country of origin of vacation travelers to Kamchatka

Country of origin	Number of responses
Russia	1, 125
Germany	124
U. S.	96
France	77
Austria	59
Great Britain	47
Italy	34
Switzerland	29
Ukraine	28
Denmark, Czech Republic, Netherlands, Canada, Latvia, Belarus, Spain	10- 20 each
Belgium, Japan, Israel, Estonia, New Zealand, Sweden, Tajikistan, Lithuania, Poland, South Africa, Australia, Uzbekistan, Greece, Moldova, Scotland, Slovenia, Finland, Korea, Armenia, China, Kyrgyzstan, Mexico, Turkey	< 10 each

Table 3 Age of Respondents Vacationing in Kamchatka

Age category	Number of respondents	Proportion of respondents
10-20	75	4
21-30	544	30
31-40	488	27
41-50	415	23
51-60	215	12
61-70	89	5
70 +	12	1
Missing	123	6
TOTAL	1, 961	100

9 Visit Characteristics

Visits were very split in the size of the groups in which they visited Kamchatka, with about one-third in groups of 1 or 2, and another 20 per cent visiting in groups sized 3 to 5. The majority of the other half of the visitor sample reported group sizes of over 5 but under 30, with very few larger than that. Yujno-Kamchatsky Nature Park accounted for a total of 1,395 visits within this sample, followed by 1,001 visits to Nalychevo Nature Park, 839 to Kronotsky Strict Nature Reserve and 828 to Paratunka Valley Hot Springs (table 4). Most people visited multiple places during their visits to Kamchatka.

Activity	Frequency	Proportion (including missing)
Trekking/Hiking	132	6.7
Camping	130	6.6
Heli-skiing	123	6.3
Swimming, soaking	113	5.8
Helicopter sightseeing	104	5.3
Sightseeing	101	5.2
Birdwatching	79	4.0
Skiing, downhill	57	2.9
Write in	52	2.7
Climbing	44	2.2
Skiing, cross-country	39	2.0
Wildlife viewing	37	1.9
Hunting	35	1.8
Marine tours	27	1.4
Snowboarding	26	1.3
Botanical Tours	25	1.3
Fishing, saltwater	24	1.2
Dog sledding	22	1.1
River rafting	17	0.9
Diving	13	0.7
Snow machining	7	0.4
Horseback tours	4	0.2
Skiing, telemark	3	0.2
Kayaking	1	0.1
Missing	314	16.0
Total	1,961	100.0

10 Contributions to the Economy of Kamchatka

On average, Non-Russian visitors spent about \$ 5,652 (156,461 Rubles) each on their total trip, per person (table 6). Russians spent less than half that, with an average of \$ 2,224 (61,566 Rubles). Subtracting out the cost of airfare or other travel costs to get there, Non-Russian expenditures in the Region remain high at \$ 4,137 (114,523 Rubles) and Russians spent an average of \$ 1,385 (38,340 Rubles). Though many less people reported on specific expenditures, from those responses received, Non-Russians spent, on average, nearly 3 times as much on lodging, over \$ 100 more on food and nearly \$ 100 more on souvenirs (table 6).

Table 6 Expenditure of Kamchatka visitors (Rubles converted to USD-1:0361128)

Visitor country of origin	Expenditure category	Average amount reported (\$ /Rubles)	Number of responses
Russian	Total travel	2, 224/61, 566	960
Non-Russian	Total travel	5, 652/156, 461	560
Russian	Travel without airfare or cruise ship	1, 385/38, 340	902
Non-Russian	Travel without airfare or cruise ship	4, 137/114, 523	466
Russian	Lodging	394/10, 907	427
Non-Russian	Lodging	1, 128/31, 226	129
Russian	Food	297/8, 222	483
Non-Russian	Food	413/11, 433	184
Russian	Souvenirs	154/4, 263	460
Non-Russian	Souvenirs	235/6, 505	206

Visitors were asked if they purchased a tour as a means of visiting sites in Kamchatka, and the frequency for "yes" responses were much higher for Non-Russians than for Russians. Nearly all Non-Russians (368 of 371 responding) purchased a tour, while only about 17 per cent (192 of 1, 125) of Russians purchased tours to see Kamchatka. Both types of visitors engaging guides had high proportions of either the entire trip in Kamchatka as part of a hired tour or a nature-based tour to protected areas, though Non-Russian visitors reported much higher proportions of fishing tours than Russians.

11 Attitudes Towards Financing and Protection Options in Kamchatka

Of the financing options presented to visitors for their response, there was high positive support for paying a fee to enter protected areas and that the fee should be used to cover both services people receive and extend to the cost of protecting the entire area (table 7). Generally, about one-fifth of responses were in the neutral category. Neutral responses were higher and support was much lower, however, for use of fees to help pay costs of visiting for people who could not afford to visit, paying for advertising for the protected areas and, instead of fees, covering expenses of the protected areas through regional taxes. Across all fee items there was a sizable non-response group with it largest for the three items which received the most negative neutral responses. For the most part, Russian and Non-Russian attitudes were similar across these attitudes, except that Russians were more negative than Non-Russians for using fees to cover advertising and for covering expenses through Kamchatka Region taxes.

Table 7 Vacationer attitudes toward fees in Kamchatka

Potential policy statement evaluated	Number of responses	Proportion neutral	Proportion agree or strongly agree
Visitors should pay a visitor fee to enter the protected area	1, 444	20. 5	60. 7
Fee should include only the costs for services that were provided	1, 334	21. 5	57. 4

Potential policy statement evaluated	Number of responses	Proportion neutral	Proportion agree or strongly agree
Fee should include the services plus the cost of protecting the entire area (for example, to help pay for guards in remote locations)	1, 317	21. 0	62. 6
Fees should include paying for people who can not afford to visit the area	1, 280	28. 9	21. 7
Fees should include paying for advertising the protected areas to tourists	1, 260	26. 2	27. 1
The Regional Authority should cover all expenses for operating the protected areas by collecting taxes from all of Kamchatka	1, 244	29. 8	20. 3

Across the sample, there was very positive support for protection of large Specially Protected Natural Areas (table 8). Neutral responses were low and there was little disagreement with this intent. About half of the respondents agreed that they saw too much evidence of damage caused by people, though only about one-third were concerned about their own impacts. The number of neutral responses was particularly high in response to questions about whether managers were doing a good job and whether management practices used were effective at protecting environmental qualities. There was very low agreement and a low number of neutral responses to the question of whether large natural areas in Kamchatka are not important to protect.

Table 8 Vacationer attitudes toward protection of nature in Kamchatka

Attitude statement evaluated	Number of responses	Proportion neutral	Proportion agree or strongly agree
It is important to protect large Specially Protected Natural Areas	1, 223	5. 2	94. 1
I saw too much evidence of damage caused by people	1, 156	22. 5	48. 9
I was concerned about the impact of my activities on the environment	1, 097	27. 8	35. 1
The managers at (the protected area I visited) are doing a good job	1, 106	40. 7	38. 6
Management practices at (the protected area I visited) are effective at protecting environmental qualities	1, 047	49. 6	29. 9
Large natural areas in Kamchatka are not important to protect	1, 133	7. 3	13. 1

12 Future Visitation Intentions

Across all visitors, about one-fifth of those who indicated their future intentions to visit believed they would return for a visit to Kamchatka within one year and another 44 per cent felt their next visit would be within the next 5 years, but not within the next year. Only 3 per cent indicated they would never again visit Kamchatka and just over 14 per cent thought they would visit again, but not within the next 5 years. About fourteen per cent provided a write-in description of their likely future visit patterns that was outside the options offered and 364 people, or 24. 9 per cent, did not answer this question.

Table 9 Future visitation intentions of Kamchatka vacationers

Intention to visit	Number of responses	Proportion of responses
YES within the next year	397	24.9
YES within the next 5 years	698	43.7
NO, not within the next 5 years	230	14.4
NO, never	48	3.0
Other, with a write-in description	223	14.0
Total	1,596	100.0
Did not answer	364	24.9

13 Conclusion

The methods selected have been used very seldom in Russia, particularly in the Far East. A post-survey evaluation suggests that the method was highly successful in generating both a year-long as well as seasonal samples. Success, however, is acknowledged to arise from having a bilingual project supervisor on sight that paid close attention to surveying details and personnel, excellent bilingual student surveyors, willing visitors, and cooperation from the airport authority. The novelty of the project may have contributed to its acceptance and success.

The large majority of visitors originating within Russia links the future of visitation closely to economic conditions of Russia, and mostly of the urban areas of European Russia. Recent market changes in Europe are probably a more influential factor on future development opportunities than Asian markets, particularly since so few Kamchatka visitors come from other Asian countries. This mix could change in the future in response to changes in many factors, such as services provided, changing leisure patterns of Russian and Non-Russian travelers, and increased publicity about unique natural features of Kamchatka, as well as changing economic conditions everywhere. The places visitors visit while in Kamchatka are not likely to change a great deal in the near future, though the Non-Russian dependence on tours and services offered could be used as a tool to either re-distribute use to reduce impacts or to maintain high quality experiences for those seeking more solitary or authentic visits.

A good understanding of the substantial proportion of tourism expenditures in service-related industries holds great promise for contributions to the economy in Kamchatka. It appears that those planning for sustainability of services and economic contributions will need to develop a two-prong (or three-prong?) approach to minimally target Non-Russian visitors and Russian visitors. Strong reliance of Non-Russians on guide services will make them of particular interest to the guide and outfitter industry. Among other potential areas that could contribute visitors would be Asia. Some analysis of the motives for visiting Kamchatka needs to be accomplished to try to understand how Russian and Non-Russian visitors differ in this important determinant of trip satisfaction and evaluation of services. While intentions to re-visit seem high, there is potential to identify markets outside the current market mix that would have similar motivations to visit as either the Russian or Non-Russian customers currently visiting. Since so many visitors were on their first trip to Kamchatka, it is difficult to predict how return visits may be different in services needed or places visited, but then could change some as proportion of re-visits increase.

The high support expressed for paying fees is significant, though a relatively high proportion of neutral responses would be an important market segment to identify more closely and target with good explanations of any fees that are charged. The fairly large number of missing responses to these questions could contribute higher numbers to the neutral or no opinion segment currently in existence. It appears that among current visitors, fees are supported not only to pay for the services they can tangibly recognize that facilitate their own visits, but also for more general protection of

these areas. Charging fees to allow more access to those less financially able or to advertise the qualities of these protected areas to others are not widely supported and should not be used to justify any fees initiated.

While such strong support for protection of these natural resources among current visitors is important, regional authorities face a dilemma in increasing support of management actions used to guard this protection. Maybe it is not the low proportion of visitors who seem to think managers are doing a good job that is the issue, but, rather, it is the large proportion of people who don't seem to know how good a job managers are doing that should cause some concern for management authorities. It is possible that with relatively low visitation levels at this time and at least among the Russian visitors a low level of familiarity with this area and ecotourism in general, nature protection at this scale is not easily comprehensible. Some efforts to help people understand the complexities of large-scale protection and some of the importance of techniques used may prove much more important than educating a visiting public about the benefits of protection among those who are already supportive of that protection.

Kamchatka is a unique area within Asia, though with a strong tie to Europe and the rest of Russia. The importance of protecting these unspoiled areas seems beyond question among visitors to these places. Opportunities to protect this part of Asia exist and Russia's travel down this path of protection seems to reflect a larger national commitment to science, sustainability of culture and economies and evolving relationships with nature than is evident from some other places in Asia.

Maintaining opportunities to witness human insignificance beside the great forces of nature in Asia is severely threatened. Sustainability of these places for human experiences, biodiversity and economic recovery is important to Kamchatka, to Asia, and to the World. With such rapid changes in occurring in politics, society, economies and relationships with nature, only the future will reveal how regional ecotourism patterns will change, how international recognition of nature protection will influence national and regional protection decisions, and the role of nature protection in future economics and quality of life.

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