

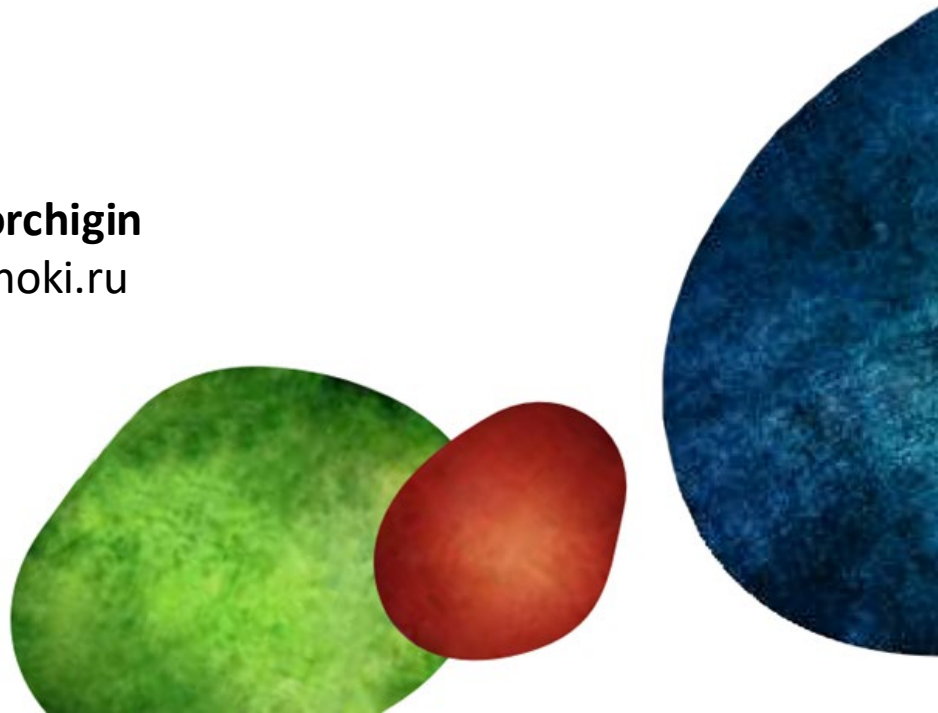


“Kronotsky Nature Reserve and sustainable and cruise tourism”

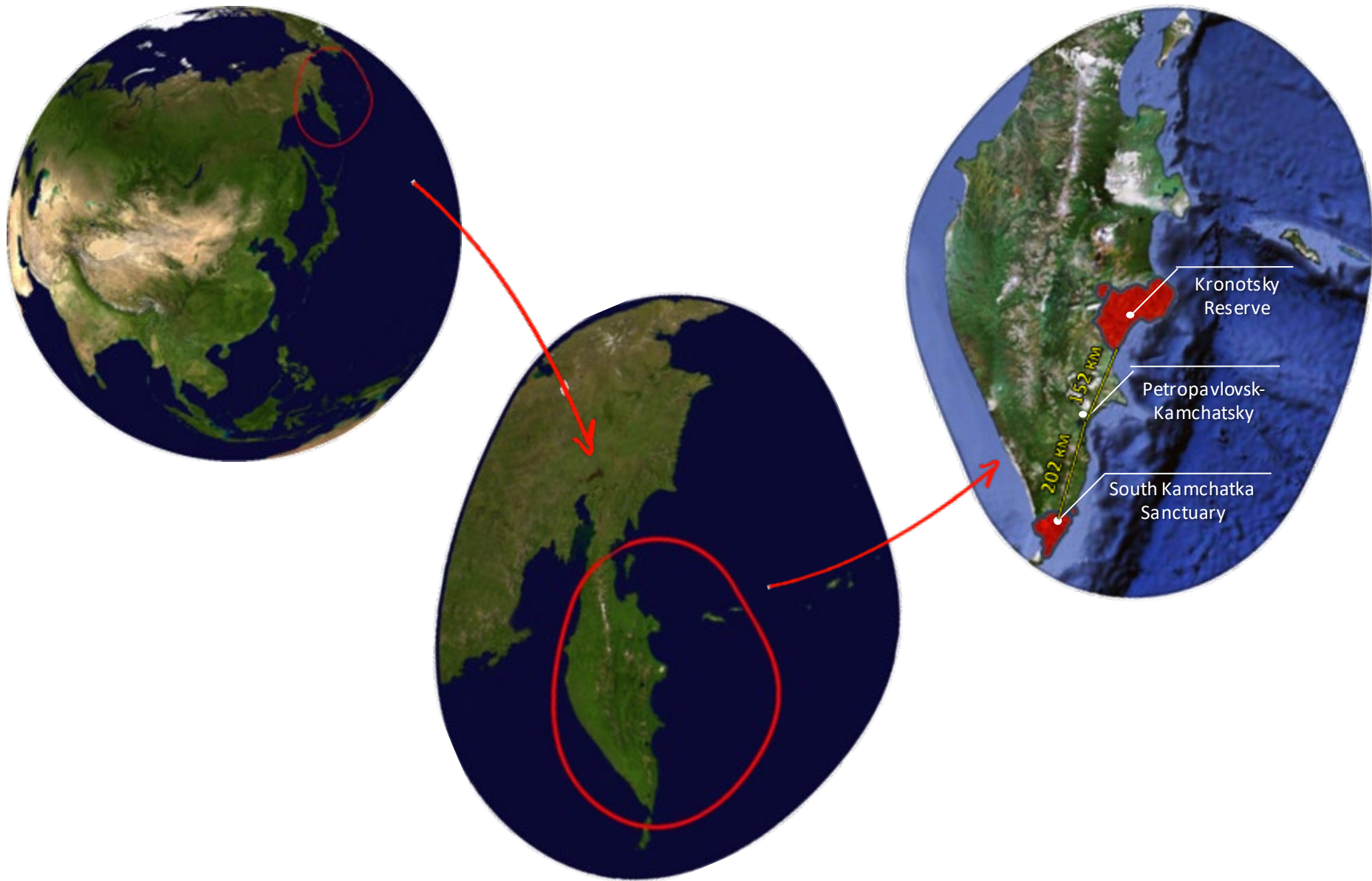
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КРОНОЦКИЙ
государственный природный
биосферный заповедник



Geographic Location of protected areas



Kronotsky Reserve

Kronotsky is one of the oldest reserves in Russia, established in 1934. However, the legacy of its preservation dates back to ancient times, when the itelmen – eastern Kamchatka's native people – first began to revere a silver fir grove. Sable hunting in the region surrounding Kronotskoye Lake was forbidden as early as 1882.

In December 1996, the Reserve was included in the "Volcanoes of Kamchatka" UNESCO World Heritage Site.

- 4 431 square miles – is the total area
- 26 volcanoes, 8 of them – active
- 3 528 m – the highest point – Kronotsky Volcano
- More than 40 geysers
- 8 km – length of the largest glacier (Tushevsky)
- 54 species of mammals
- More than 700 brown bears
- 244 species of birds
- 104 fish species (5 species of salmon, spawning on the territory)
- 767 species of vascular plants



Uzon Caldera



Valley of the Geysers



Death Valley



Kronotskoye Lake

Kronotsky Reserve aims to:

- Conserve biological diversity and maintain protected ecosystems in their pristine natural state;
- Organize and carry out scientific research, including compilation of the annual Chronicles of Nature;
- Implement of ecological monitoring;
- Conduct ecological education;
- Participate in state ecological assessments of plans for concerning the construction of commercial and other facilities;
- Assist in the training of scientists in environmental conservation.



South Kamchatka Sanctuary

South Kamchatka Sanctuary established in 1983, is situated on the southernmost tip of the Kamchatka Peninsula, on the site of the Asacha and Lopatka Beaver reserves, created here in the late XIX century.

The Sanctuary was included in the List of World Heritage Sites under Volcanoes of Kamchatka nomination. Powerful geological and volcanic processes created the unique landscapes, and areas of the South Kamchatka Sanctuary are examples of exceptional beauty.

- 322 000 hectares – is the total area
- 4 active volcanoes
- 2 161 – the highest point – Kambalny Volcano
- 316 m – maximum depth of Kuril Lake
- 5 million salmon enter the Lake for spawning
- more than 200 brown bears
- more 2 000 sea otters
- more than 750 birds of prey winter on the territory
- 50 settlements of marine birds



Kuril Lake



Kutkhiny Baty



Heart of Alaid island



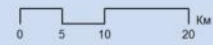
Ilyinsky Volcano

South Kamchatka Sanctuary

The regime of the Sanctuary is strict, similar to that of Kronotsky Reserve. The Sanctuary has the following goals:

- Conservation of South Kamchatka's natural ecosystems, including the unique Kuril Lake Basin ecosystem;
- Conservation major migratory routes for birds;
- Preservation of sea otter, bighorn sheep and brown bear population.





Unique ecosystems of the Kronotsky Reserve

The Valley of the Geysers

The Valley of the Geysers was discovered on July 25, 1941 by nature reserve scientist T. I. Ustinova and her assistant A. P. Krupenin.

The eight-kilometer-long canyon of the Valley of the Geysers reaches four-kilometers wide in places, and up to 400 meters deep. The canyon was carved by the Geyser River. There are dozens such canyons in Kamchatka, but this one is unique due to its more than 40 geysers and many hot springs all within a six-kilometer stretch.



Unique ecosystems of the Kronotsky Reserve

Uzon Caldera

This unique phenomenon, like a natural laboratory, provides a live demonstration of thermal ecosystem processes. The hydrothermal system of the Uzon is one of the most powerful in Kamchatka. Here one can observe, unlike anywhere else on Earth, a number of processes involved in the creation of volcanoes, products of the glacial period, and fields with virgin sulfur beds and colorful rock formations created by hydrothermal forces.

The caldera (from the Spanish for bowl or kettle) is a bowl-shaped basin, 9×12 km in size. The highest point of the caldera wall is Barany (Ram) Peak, 1,617 m above sea level, while the lowest point is 650–700 m. The caldera was formed about 40,000 years ago.



Unique ecosystems of the Kronotsky Reserve

Kronotskoye Lake

Kronotskoye Lake is the largest freshwater lake and drainage basin on Kamchatka; it is the second largest in terms of water volume and the third deepest on Kamchatka. Kronotskoye Lake was formed after the ancient Paleokronotskaya River was dammed by a massive lava flow along with pyroclastic sediments from eruptions of the Kronotsky and Krasheninnikov volcanos. The lake is unique not only due to its origin, but also because of the natural ecosystems within its watershed.

A population of kokanee (a freshwater form of the sockeye) with about 30 million fish evolved here from anadromous sockeye as a result of long-term isolation.



Unique ecosystems of the Kronotsky Reserve

Graceful Fir Grove

The Kamchatka or Graceful Fir Grove, which is surrounded by a deciduous forest of Erman's birch in the lower reaches of the Novy (New) Semyachik River, is one of the taiga conifer islands of Kamchatka. The native Itelmen people have known about and avoided this forest for more than 250 years. The grove inspired fear in the Itelmen because of its mystique. Even today two of its mysteries remain unresolved — its origin and taxonomy.

Some believe that this grove survived the glacial epoch.

The Graceful fir is an important scientific, historical, esthetic, and educational natural phenomenon.



Unique ecosystems of the Kronotsky Reserve

Semyachiksky Liman (Lagoon)

The Semyachiksky Liman is situated on the southern border of the Reserve. In summer, the waters of the large shallow lagoon grow warm. During low tide, numerous shallows appear, offering rich feeding grounds for marsh birds.

The lagoon and neighboring Novy Semyachik River are migration routes for Pacific salmon, white-spotted char (kundzha) and Doly Varden, which in turn attract fish-eating birds, bears, and other predators.

The mouth of the lagoon during fall and winter hosts one of the largest populations of larga seal.

Semyachksky Liman is included into the List of the Wetlands of special national importance. The reserve has designated Semyachinsky Liman as an area with significant scientific value.



Sightseeing tours of Kronotsky Reserve

1. **“Geysers of the Kronotsky Reserve” — a one-day guided tour**
2. **“Uzon’s steaming earth” — a one-day guided tour**
3. **“Miracles of Kamchatka” — a three-day walking tour of the Uzon-Geyser area**
4. **“Death Valley” — a one-day guided tour**
5. **“Winter’s Tale” — a snowmobile or ski tour to the Kipeliye springs**
6. **“Lake in the High Mountains” — a one-day tour on the Kronotskoye Lake**
7. **“To the Deep-sea Dwellers” — a tour of the sea waters**



“Geysers of the Kronotsky Reserve” — a one-day guided tour

The eco-informational focus of the tours involves observation of nature in a unique geothermal region. Here, visitors to the Kronotskiy Reserve will see steam fountains erupting from geysers in a beautiful mountain landscape, thermal fields, colorful earthen chambers, many jets of water, noisy hot springs and small geysers, streams, and waterfalls, learn about the causes and consequences of the catastrophic landslide from 2007 and see Geyser Lake.

Often, groups are able to spot the Kamchatkan brown bear — king of this territory.

- *Level of difficulty*: a generally accessible route for people with full physical mobility. Special sports training is not required.
- The *number of visitors* is limited to 5 000 a year to reduce the ecological impacts of recreational activities on wildland resources.
- The tour's operation is restricted to May and June. Specific dates are outlined every year.



Time on the territory: 2–2.5 hours

“Uzon’s steaming earth” — a one-day guided tour

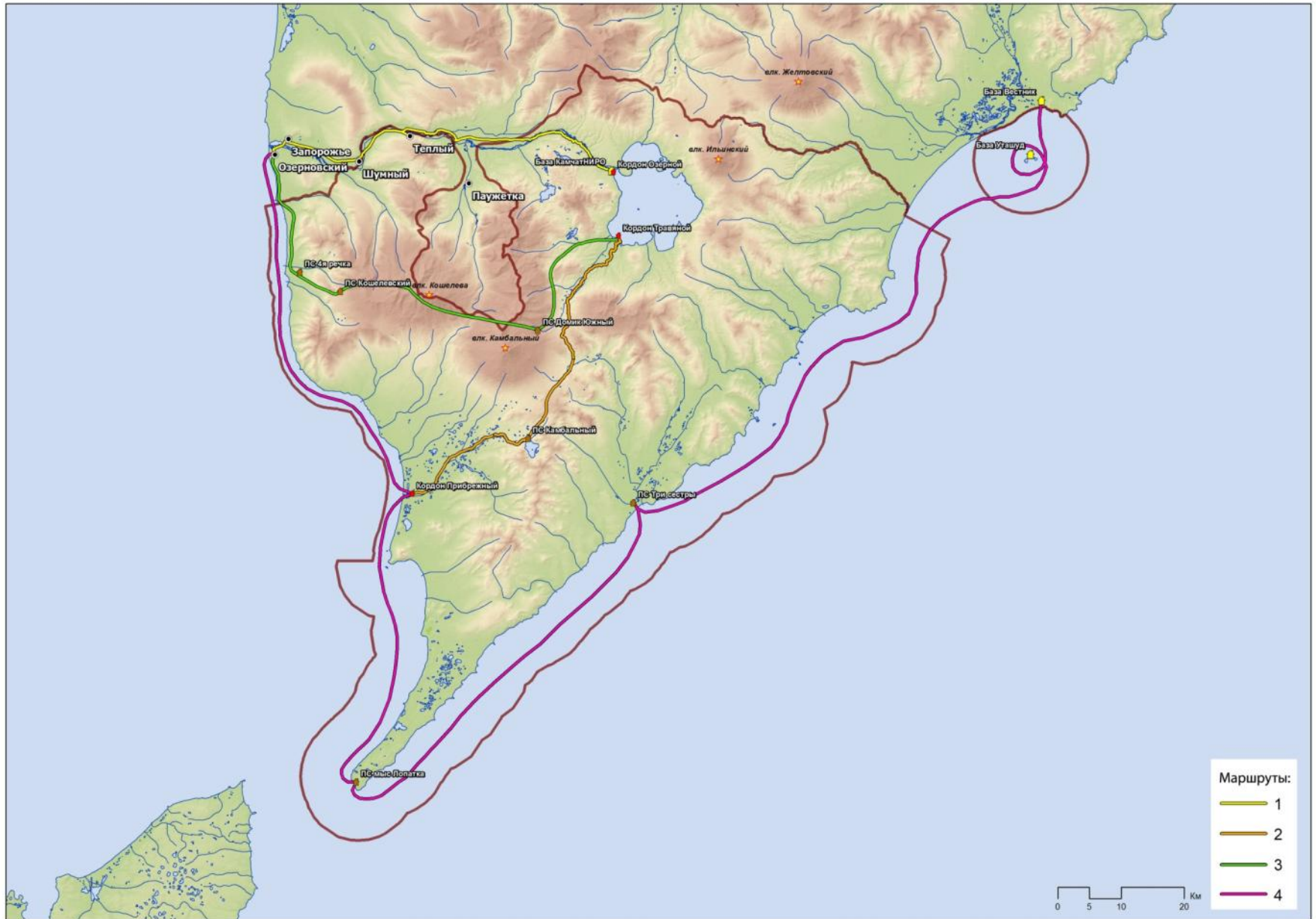
As far as contemporary volcanism is concerned, the Uzon Volcano caldera is a unique spot in all the world. The Itelmen call Uzon “Steaming Earth.” Walking over its wooden platform, visitors feel the gigantic energy trapped in the Earth’s bowels. Uzon amazes you with the wealth and forms of its volcanic manifestations.

The eco-informational focus of the tours involves observation of nature in a unique geothermal region. Along the way, visitors will see the Bannoye, Chloride, and Figure Eight Lakes, Murky Geyser, earthen chambers, and mud volcanoes, and view different panoramas.

- *Time on the territory:* 2–2.5 hours
- *Level of difficulty:* a generally accessible route for people with full physical mobility. Special sports training is not required.
- The *number of visitors* is limited to 5 000 a year to reduce the ecological impacts of recreational activities on wildland resources.
- The tour’s operation is restricted to May and June.



Tourist routes of the South Kamchatka Sanctuary



Unique ecosystems of the South Kamchatka Sanctuary

Kuril Lake

Kuril Lake was formed about 8,000 years ago as a result of a series of enormous volcanic explosions which shook southern Kamchatka.

Kuril Lake as we know it today covers 77 square kilometers, holds 15 cubic kilometers of water, and has an average depth of 195 meters.

The largest population of sockeye salmon in Eurasia spawns in Kuril Lake.

The lasting abundance of sockeye is one of the most important characteristics of this natural ecosystem. To feed on the abundance, over 200 bears come here at the end of the summer. This is the best place for observing these beautiful animals. Foxes and otters also come here to feed on salmon.



Unique ecosystems of the South Kamchatka Sanctuary

Ilyinsky Volcano

Ilyinsky Volcano is one of the most beautiful volcanoes on Kuril Lake with its perfectly-formed cone. With a height of 1,578 meters and a diameter at its base of eight kilometers, this is one of the youngest active volcanoes on Kamchatka. This volcano is the most noticeable adornment in the lake's panorama on calm, sunny days.

A hot beach with thermal springs lies in the place where the volcano's slope touches Kuril Lake's waters, in Tyoplaya (Warm) Bay. The only known eruption was in 1901, when four crater funnels were formed, the largest of which is 800 by 1,200 meters with a depth of over 400 meters.



Unique ecosystems of the South Kamchatka Sanctuary

Lopatka Peninsula

Lopatka Peninsula is the southernmost point of Kamchatka. It is 25 km long and between 2 and 7 km wide. The peninsula is largely wetlands and has numerous tundra-lakes.

A population of an endemic species of rock sandpiper is situated on Lopatka Peninsula and Shumshu Island, numbering only several hundreds of pairs. The Southern Kamchatka rock sandpiper is listed in the Red Data Book of Russia.

Lopatka Bay plays a special role during bird migrations. In autumn, the abundance and intensity of birds is the highest in the Far East when, during peak migration periods, 9,000–11,000 birds fly through the bay.



Unique ecosystems of the South Kamchatka Sanctuary

Utashud Island

Utashud is a small island rising 80 meters from the Vestnik (Messenger) Bay, found kilometers from shore, across from the estuary of the Vestnik River high.

One of the richest islands on the southeastern side of Kamchatka, Utashud is notable for its population of sea otters (up to 300 individuals), as well as its Steinneger's harbor seal and spotted sealrookeries. From spring until late December, a group of grey whales feeds here.

Utashud is inhabited by 10 species of marine birds with a total abundance over 22,000 pairs, including one of the largest colonies of slaty-backed gulls (4,000 pairs) and tufted puffins (10,000 pairs).



Sightseeing tours of the South Kamchatka Sanctuary

- 1. “The Kingdom of Salmon and Brown Bear” — a one-day guided tour**
- 2. “Guests of the Brown Bear” — multiple-day guided tour**
- 3. “Secrets of Kuril Lake” — a boat excursion to the islands and archipelagos**
- 4. “There in the Fog” — a multiple-day excursion on Kambalnoye Lake (South Kamchatka Sanctuary)**



Guided tours to the Kingdom of Kuril Lake

The ecological education program aims to gain a deeper understanding of the Kuril Lake ecosystem, the behavior of brown bears during the salmon spawning period, and the special features of the salmon population in Kuril Lake. A special platform has been built for tourists. From it, they can observe the behavior of animals in safety and comfort. There are boat tours of the lake, explorations of the islands, visits to fish research facilities near the river source, and strolls on the pumice flats beside the bay and tundra.

- *Level of difficulty:* a generally accessible route. Special sports training is not required.
- *Safety:* The tour travels along flat paths and must be accompanied by a Reserve inspector and tour guide.
- *Season:* The tour's operation is restricted to May and June.

"The Kingdom of Salmon and Brown Bear" — a one-day guided tour. Time on the Sanctuary territory: 1.5–

2.5 hours.

"Guests of the Brown Bear" — multiple-day guided tour. Length of excursion: 1 day. If you wish to extend your stay in the South Kamchatka Sanctuary, it's possible to purchase additional tours for each day.



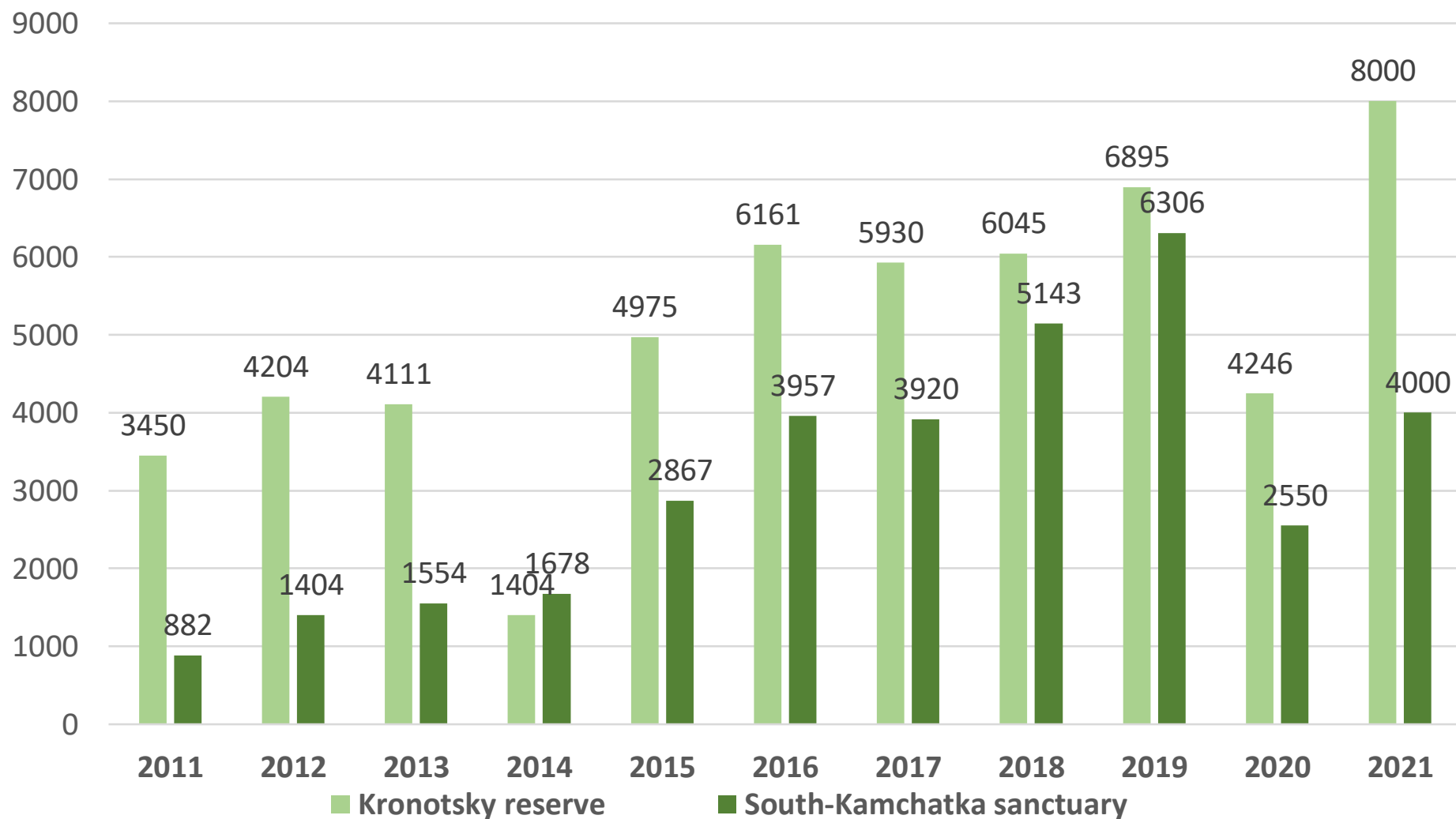
Our facilities. Building of a Visitor Center in the Valley of the Geysers



Our facilities. Building of a Visitor Center on the Kuril Lake, Travyanoy Cape



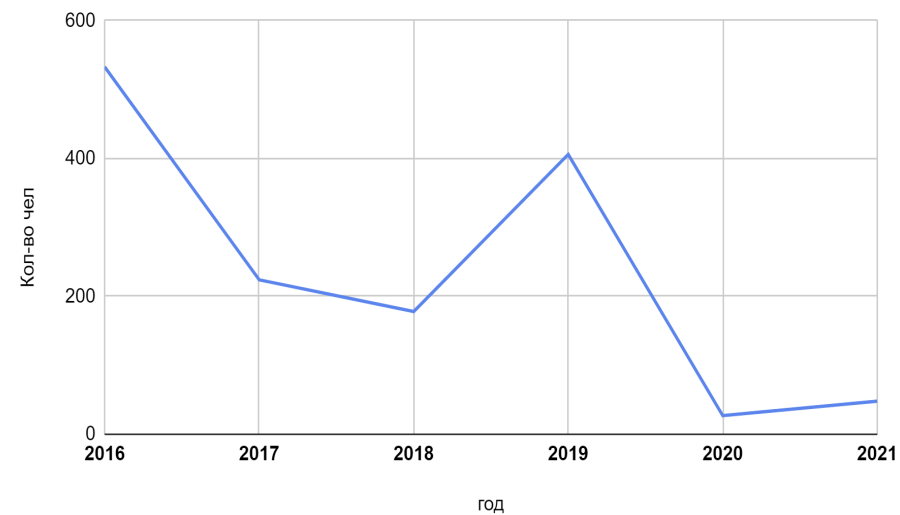
Number of sea Visitors a year



Numbers of marine tours visitors

	Visitors	Vessels
2016	533	5
2017	224	5
2018	178	4
2019	406	7
2020	27	2
2021	48	7

Total visitors



Marine tours



A vertical strip of a fish pattern, showing various sizes and orientations of fish swimming upwards. The fish are rendered in a simple, stylized manner with dark outlines and some internal shading. The pattern is dense and repeats vertically.



TOURIST AND RECREATION SUSTAINABLE CLUSTER

TOURIST AND RECREATION CLUSTER "RESERVE KAMCHATKA: LAND OF PEOPLE, VOLCANOES AND SALMONS"

PURPOSE: Preservation of the pristine nature of the south of Kamchatka and improving the well-being of the population

Objective 1: Create a model area operating on the principles of sustainable development, and further extrapolate the experience gained to other attractive natural areas of Kamchatka;

Objective 2: To involve the local population in an economy based on the preservation of a unique nature, and **not only on the consumption of natural resources.**

What do we need to do:

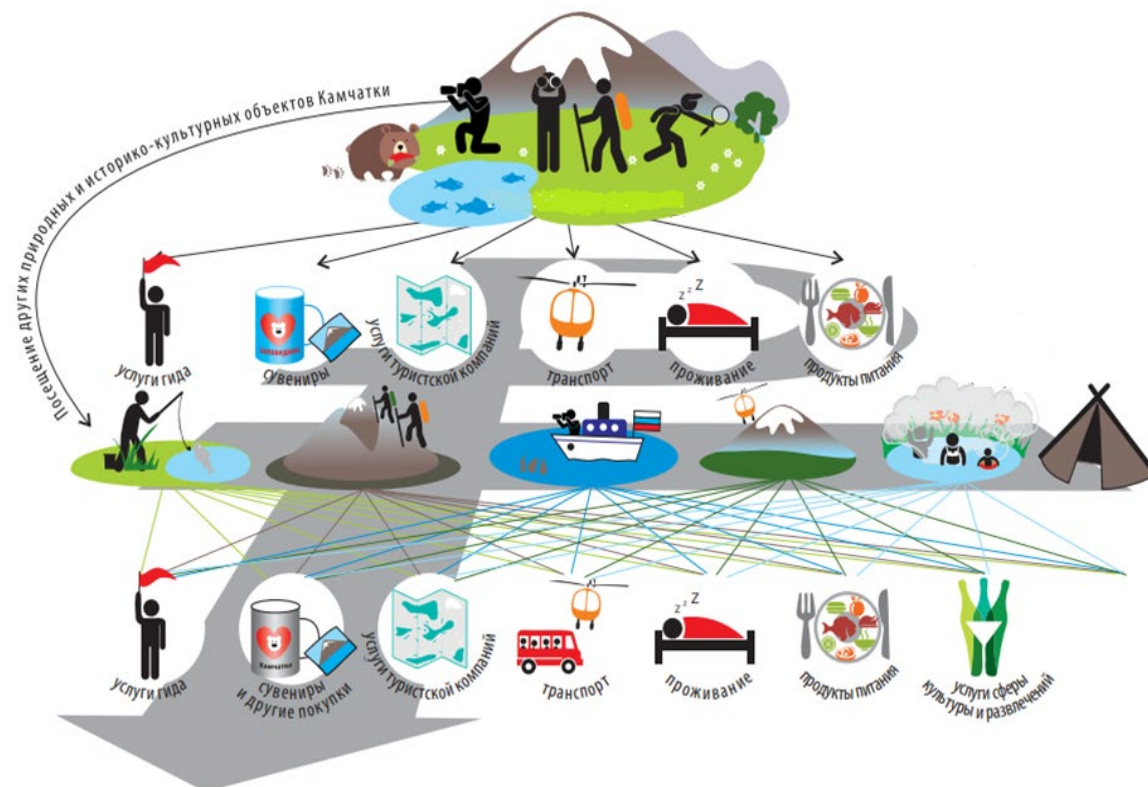
Redirect the tourist flow through settlements, bordering on the reserve;
Solve the "garbage problem" in the villages and, as a result, reduce the number of outings of bears to settlements;

Conduct scientific research, namely a comprehensive study of the ecosystem of the Kuril Lake basin, which will allow minimize the man-bear problem and maintain a sustainable use of the resource "Ozernovskaya sockeye".



Multiplicative effect

- new jobs and employment growth, incl. in rural areas;
- income of travel companies, catering and entertainment enterprises;
- increase in the number of SMEs;
- increase in tax revenues to the regional budget;
- combating poaching through public control;



Kronotsky Nature Reserve is not a tour operator!

Additional information on territories visitation

Getting there: Tourist agencies throughout Kamchatka organize tours to the Kronotsky Reserve and the South Kamchatka Sanctuary. For more information, call the Kronotsky Reserve's Division of Ecological Education and Tourism at +7 (41531) 7 16 52.

You can buy souvenirs, books, and photo albums in the visitor-centers situated on the territories - all proceeds will be used for the preservation of natural systems, research of the territories, and growth of environmental education.





Thank you for your attention!
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