



South Kamchatka Federal Sanctuary, named in honor of Tikhon I. Shpilenok
**ECOTOURISM IN THE LAND OF BEARS —
RULES OF BEAR HOSPITALITY**



THE SOUTH KAMCHATKA FEDERAL SANCTUARY – WHERE NATURE RULES

Welcome to the South Kamchatka Federal Sanctuary (Zakaznik) named after Tikhon I. Shpilenok, a place where nature reigns supreme!

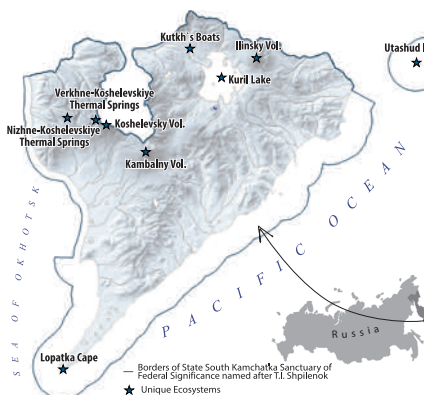
Thanks to the strict-protection regime of the sanctuary – similar to that of a Russian *zapovednik*, the world's strictest level of protection as rated by the International Union for Conservation of Nature – a pristine world is preserved here. Its more than 3 thousand square kilometers are rarely seen by humans – except for a fortunate few thousand people each year, mostly brief visitors to the sanctuary's spectacular Kuril Lake.

Active volcanoes, valuable habitat for snow sheep and brown bear, coastal mating habitat for sea otters as well as spotted and harbor seals on the remote territories of Utashud and Gavryushkin Kamen Islands and Cape Lopatka, almost untouched landscapes that display the unique natural complexity of the peninsula of Kamchatka and the southward-reaching Kuril island ridge – these are just parts of the extraordinary natural world protected by this splendid reserve.

A special pride of the sanctuary is the splendid habitat that we provide for the largest population of brown bears within any protected territory in the world.

THE SANCTUARY IS A SPECIALLY PROTECTED NATURAL AREA OF WORLD SIGNIFICANCE:

- in 1996, the sanctuary received the status of a World Natural Heritage Site of UNESCO (as part of “Volcanoes of Kamchatka”) for its very important contribution to the preservation of unique natural sites, biological and landscape diversity;
- in 2016 the territory of the sanctuary and nearby settlements became part of the Kronotsky biosphere reserve as an example of the coexistence of Nature and Man.

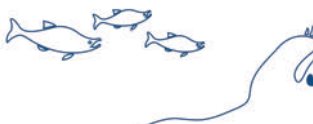


Figures and facts:

- 3,373 km² – total area of the sanctuary
- 960 km² – sea area
- 4 active volcanoes
- 77 km² – the area of the surface of Kuril Lake – the largest freshwater reservoir in Kamchatka (in terms of water volume)
- 316 m – the maximum depth of Kuril Lake
- 425 species of vascular plants
- 72 species of algae and protozoa
- 46 species of mammals
- 48 species of fish
- about 1.7 million sockeye salmon come annually to Kuril Lake to spawn
- about 950 brown bears constitute the largest population within any protected territory in the world
- more than 700 golden eagles, white-tailed eagles, and Steller's sea eagles winter in the sanctuary
- 110,000 birds fly along Cape Lopatka, Kamchatka's southern tip, during autumn migration



2





THE UNIQUE ECOSYSTEM OF KURIL LAKE

The living heart of the South Kamchatka Sanctuary is volcano-flanked Kuril Lake – the second largest and the deepest freshwater lake in Kamchatka and the largest spawning ground in Eurasia for sockeye salmon.

An average of about 1.7 million sockeye salmon arrive in the lake annually, after swimming upstream from the Pacific Ocean. Their spawning season, unusually long, lasts into the spring. The remnants of salmon left behind, even in the upper reaches of small streams, provides a broth of nutrients that support rich biodiversity throughout the lake basin.

An unrivaled profusion of large predatory birds arrive at the lakeshore in winter – up to 50 golden eagles, 100–150 white-tailed eagles, and 300–700 Steller's sea eagles. Residing on the islands of the lake is one of the largest freshwater populations of the Pacific gull. On the lake's ice-free areas, hundreds of swans and thousands of ducks winter. All of them, including forest birds that elsewhere are “vegetarians,” feed in one way or other on sockeye salmon or its caviar.

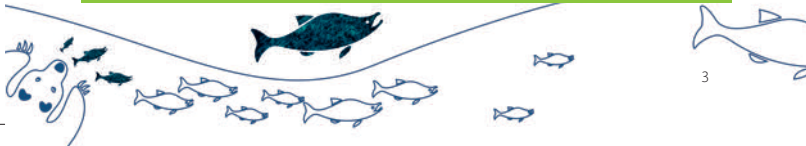
But the most numerous predators on Kuril Lake are brown bears. Observations of these animals in their natural habitat are the basis of summer research and education programs in the South Kamchatka Sanctuary.

The South Kamchatka Sanctuary is home to the world's largest population of brown bears within any protected territory. But this was not always the case. Today's abundance for this group of brown bears developed due to years of strict protection and careful management designed to combat poaching and to preserve the habitat of these animals.

The development of responsible tourism – designed for minimal impact on animals and their habitats – allows you to enter their wonderful world and allows the sanctuary to share with you our sensitive attitude to this land and its inhabitants.

Protected natural areas are oases of wildlife that offer a unique opportunity to see untouched landscapes and observe animals in their natural habitat. Such territories are increasingly becoming a favorite destination for seekers of wild beauty, stress-free solitude, and primordial natural harmony.

Please remember that, when you step into the territory of the South Kamchatka Sanctuary, you enter the Home of Wild Animals. This brochure will help you see and understand the lives of the dominant residents of these places – brown bears – and be considerate and respectful during your time as their guest.





BROWN BEARS OF THE SOUTH KAMCHATKA SANCTUARY

The South Kamchatka Sanctuary nurtures the largest population of brown bears within any protected area in the world – about 950 individuals according to recent aerial surveys.

The density of the population of brown bears in the basin of Kuril Lake is the highest in the world. And the lake's vicinity provides habitat to support the entire annual cycle of life for these resident animals.

The bear year begins in late March or April, when adult male bears awaken and leave their winter dens. Females with cubs born this winter – yearlings – emerge from their lairs later than others, during May.

During May and June, the height of the mating season, multiple bear pairs form. Pairings are impermanent – both males and females mate with several partners during a breeding season. Mating often leads to ritual fights, some of which explode into fierce battles.

Bear mothers continue to take care of their cubs to the age of 2.5 years, after which females begin mating again. In this period cubs move away from their mothers due to the emergence of adult males nearby, who can threaten the life of young. Not only do males not participate in caring for their offspring – males also commonly engage in cannibalism, a natural form of population control that females resist furiously. Mothers' lengthy care for offspring provides cubs not just with safety but also with training in complex fishing skills.

The second half of summer and autumn is an important time in the life of bears. To accumulate a sufficient amount of fat deposits, in preparation for the six cold months that they must spend in their dens in a state of winter sleep, bears must eat intensively.

Bears are fortunate to be omnivorous – they eat berries, pine nuts, grassy vegetation, and also the leaves and shoots of trees and shrubs. But for the very fortunate bears of the South Kamchatka Sanctuary, the main food is sockeye salmon. It is no accident that the Latin name of the subspecies of the Kamchatka brown bear is *Ursus arctos piscator*, which in Latin means “fisherman”.



BEAR NURSERIES

Only on Kuril Lake can you observe our unique type of bear “kindergarten”: Yearlings from different broods often are left together along the shore while their mothers are fishing nearby.



4





Sockeye (*Oncorhynchus nerka*) is one of the valuable species of Pacific salmon.

The largest sockeye population in Asia relies for successful reproduction on the basin of Kuril Lake and its only out-flowing river, the Ozernaya. Beginning in late May, sockeye start their spawning run, fighting upstream toward the lake against the river's fast-moving waters. Their spawning will continue in the river until early November, and in Kuril Lake spawning can continue to the end of March! On days of mass migration for spawning (from mid-July to early September), up to 200,000 sockeye salmon enter the river and lake per day.

The abundance of fish that arrive at the shores of the lake and in the estuaries of spawning rivers attracts large concentrations of bears, which array themselves in an unusual social structure.

Often up to 50 individuals can be observed from one vantage point! Despite the small distance between bears, their distribution is not chaotic. Females with cubs and young individuals feed near each other, seeking to keep a safe distance away from large males.

Near the end of October, as snow covers the ground, bears slip into their wintertime dens. The first to go to bed are pregnant females and mothers with cubs. The last are adult males. Thanks to the lake's abundance of food, some bears stay active in the early winter months. For lairs in the vicinity of Kuril Lake, animals use the hillsides' natural shelters, such as caves or niches beneath stones. The rocky stretches of Cape Tugumynk and the Samang archipelago, traditional bear wintering grounds, provide the main "maternity wards".

Bear cubs are born in January – February and remain in the den until May. Cubs are born blind, with closed ear canals, and weigh half a kilogram – 400 times less than the weight of an adult bear! In the den, cubs live at the expense of their mother and grow rapidly thanks to her milk. After 4 months, as cubs leave their winter shelter, they have increased their weight 12–15 times.

During the first year of life, bear cubs begin to adjust to basic bear food, but cubs continue to feed on their mother's milk for up to 2 years.

Because Kuril Lake offers a greater abundance of food than most bear habitat, large broods at the lake are considerably more frequent – often three or even four cubs. Rare families with five cubs have been recorded here.

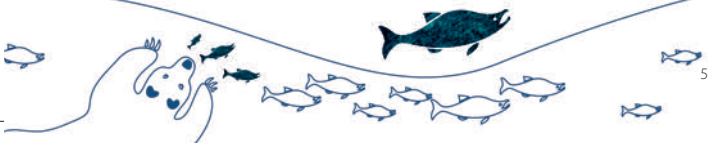
FIGURES AND FACTS

WEIGHT AND SIZE

The brown bears of Kuril Lake include some of the largest representatives of their species. The weight of large males can exceed half a ton, with body length up to 2.5 meters.

Age

In nature, individual brown bear can survive up to 30 years.





ETHICS OF OBSERVATIONS

Observation of brown bears in South Kamchatka Sanctuary offers a unique opportunity to get to know the lives of a majestic predator in an environment undisturbed by humans. To help you to preserve this opportunity for future generations, to reduce interference with the natural lives of bears, and to get the fullest possible impression of the wild life of this sanctuary, we ask you to follow 7 principles developed to foster an ethic of respectful behavior towards nature and towards our other guests.

ETHICS OF PHOTOGRAPHING

- Be a neutral part of the environment. Photographing bears at a distance will allow you to observe their natural behavior while assuring that both you and the bears will feel safe.
- When photographing a bear, do not use a flash – this can frighten the animal and provoke aggression.
- Cameras that can be triggered remotely, including GoPro, can only be used when fixed on the photographer's body or positioned in the immediate vicinity of the group's location. Make sure that no bear could possibly make contact with the camera.
- Photo and video shooting using unmanned aerial drones, including quadcopters, in the territory of the South Kamchatka Sanctuary is prohibited. (In rare cases with special permission, the use of such equipment is allowed by participants of professional film crews.)
- For professional photo and video shooting, a special permit is required by the administration of the sanctuary.

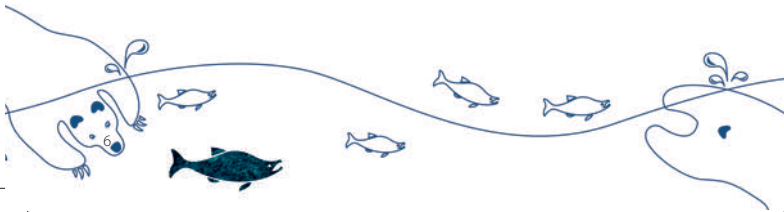
7 GOLDEN ETHICAL PRINCIPLES FOR OBSERVATION OF WILD ANIMALS

1. Respect the right of animals to live on their territory and to retain as much personal space as they choose

The most important thing we should remember: The South Kamchatka Sanctuary is the territory of brown bears, and we are guests in their home.

Try to evaluate each of our actions in terms of acceptability to these original residents. Using binoculars and telescopes allows us to view animals without getting too close or violating their personal space.

The bears of the South Kamchatka Sanctuary are tolerant of humans. But do not abuse this attitude! Be polite guests!





2. Do not displace or crowd bears; don't trespass on their turf

Your presence should not disturb animals or alter their natural behavior. Approach bears calmly, giving each animal the opportunity to see you with ample time and, if it chooses, to retreat. When traveling and choosing where to stop, do not halt beside a waterway (main roads for bears), at trees marked by them, or near places where bears evidently have been resting or trails leading to those places. Never pursue animals.

The degree of tolerance of a bear to the presence of a person is related to the nature of the animal and can vary depending on many factors including stress, hunger, and weather. If your presence changes an animal's behavior, or if you observe signs of stress or anxiety, then you have already invaded the private space of the bear and have had a negative impact.

If your movements have any impact, you should move further from the bear. You may need to stop observing that bear and move to a new location, perhaps following instructions from a ranger or other employee of the sanctuary.

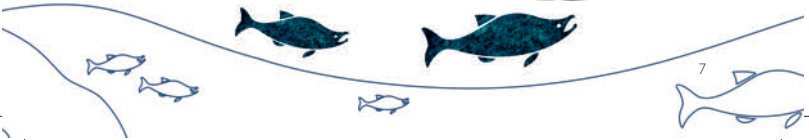
When observing bears in the territory of the South Kamchatka Sanctuary, do not approach them closer than 30 meters. Experienced sanctuary employees, accompanying your group, may tell you to move further away. Your responsibility is to follow his instructions without delay.

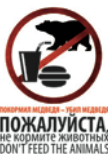
SIGNS OF ANXIETY AND STRESS IN BEARS:

- yawning;
- snorts and low guttural clicks;
- urination and defecation;
- drawing of the lips and snuffing, exhaling air sharply;
- slow and disoriented movements;
- salivation and frequent swallowing;
- chattering with teeth;
- stiff gait with widely spaced hind legs and rotational movements of the feet in the ground;
- swings of the paws and bluff attack, intended to frighten.

When observing such signs, strictly the instructions of the reserve officer – to avoid risking your safety as well as disturbing the animal.

Some dominant bears, after encountering a human, prefer to leave slowly and with dignity, without showing external anxiety. Give the bear time for this action...





3. Keep your group close together and minimize noise and sudden movements

When watching the bears, behave calmly: do not shout, do not swing your arms, and do not make sharp movements.

Be very careful not to run – for even a calm bear, your flight may look like the behavior of a victim and can trigger an instinct to pursue you aggressively.

Do not try to attract the attention of bears with loud sounds such as screams or whistles – sounds that a bear may interpret as signs of disrespect or aggression.

Try to stay quiet and do not play music. We do not always realize how much extraneous sounds can disturb wild animals or other people. Listen instead, and let others hear, the music of the forest: the singing of birds, the rustle of leaves, and many other sounds of wild nature.

An exception about sound: making small noise can be helpful if you are moving in areas where bears cannot see you coming, such as trails through thick forest. In this rare situation, your noise can warn a bear that you are nearby and can reduce the risk of a dangerous encounter.

4. Travel along paths and observe from designated places

Go with a guide and a sanctuary employee on designated routes in order to reduce the impact on the ecosystem. The best observations usually are conducted from towers or other viewing points selected by the sanctuary employee.

5. Do not approach sick or “orphaned” bears

Do not try to help sick or “orphaned” animals. You are in the wild, where life proceeds without human intervention, and the principles of natural selection operate. In addition, any solitary cubs that you meet will usually have a mother nearby. Approaching such a baby can be extremely dangerous.

6. Do not feed wild animals!

By doing this, you would doom them to destruction.

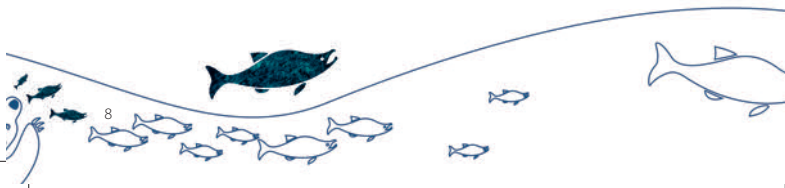
Bears on Kuril Lake rarely get access to human food or garbage, so they are not inclined to pursue people for food. By following the rules for storing and eating food, you will help us to preserve the lives of our bears.

7. Do not attract bears with smells

Bears have a wonderful sense of smell.

When you visit the sanctuary, do not use strong-smelling aerosols or aromatic products. They can attract bears or cause them anxiety.

When observing, refrain from smoking – it can also disturb the bears and annoy the people around you.





SAFETY IN THE LAND OF THE BEARS

While in the territory of the South Kamchatka Sanctuary, you should always remember that you are in the home of brown bears. No matter how friendly the bears seem to you at first glance, they always remain large predators.

Most of the bears you meet on Kuril Lake have had past interaction with people. A bear's experience meeting you will affect his behavior when meeting with a person in the future. Plan to ensure that each meeting is peaceful for both you and the bear.

Common sense and respect for wild nature, adherence to the ethics of observation, and knowledge of the rules of behavior in the country of bears – all will allow you to reduce the risk of dangerous confrontation with wild animals.

Employees of the zakaznik are well-trained in the behavior of wild animals living in the territory, and it is your duty to follow their instructions during every observation of wildlife.

Important to remember!

- **Almost all conflicts with a bear are provoked by a person.**
- **Human security is the responsibility of every individual.**
- **Bear safety is also the responsibility of every human visitor.**
- **Security near any bear depends on our knowledge and self-discipline.**

WHAT IS IMPORTANT TO KNOW IN ORDER TO REDUCE RISKS

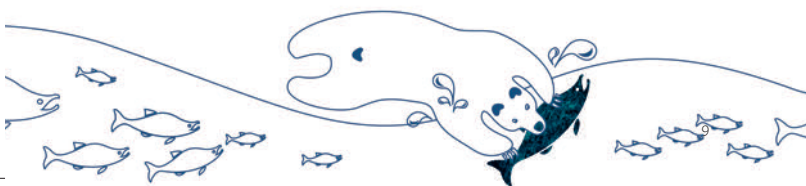
To protect yourself and animals during your stay in their homeland, remember the following facts about brown bears:

1. Bears do not like uninvited guests and surprises

When you meet brown bears in their home, try to ensure that the animals know about your presence in advance and do not interrupt their usual activities.

If you are watching from a tower or an open area, the bear will notice you in advance; but when you are moving in brush or tall grass it is important to let the bear hear that you are coming – speak often but not loudly.

You are guaranteed the greatest security if you are in a unified group. The risk of bear aggression rises if a person is alone.





2. Each bear has its own “personal space”

Never approach a bear and do not try to stand next to it, even if the beast seems good-natured or indifferent to you. Each bear has its own “personal space” – invading that space will be perceived as a threat.

Only a sanctuary employee, based on assessing each specific situation, can aptly determine the distance to which you may approach any bear! The recommended minimum distance for a person approaching a bear is 30 meters. If a bear chooses to approach a group at a closer distance, the sanctuary employee can assess whether that distance remains safe.

Never follow the bear, and do not approach it with quick steps. Be attentive when meeting a family of bears or solitary cubs. Do not move in a way that a female could think is threatening to her cubs. Never enter the area between a mother and her cubs.

3. Bears at Kuril Lake tolerate proximity to other bears and to people

The abundance of fish in the South Kamchatka Sanctuary supports the world’s highest density of brown bears. As they pursue salmon, our bears may gather peacefully in tight clusters. Close encounters with people are also familiar for our bears.

Although the probability that a bear will attack a group of people is low – most bears show aggression only when protecting their prey, cubs or personal space – it is important to reduce the chance to a minimum.



A bear that is standing on its hind legs is not acting aggressively. Extra height helps the animal to view and identify an object of interest.

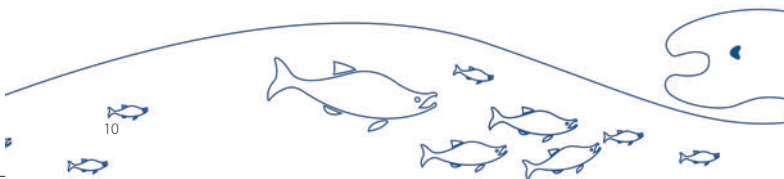
Never run away from a bear – it can easily overtake you. Any predator perceives flight as a demonstration of fear, which can provoke him to pursue and attack.

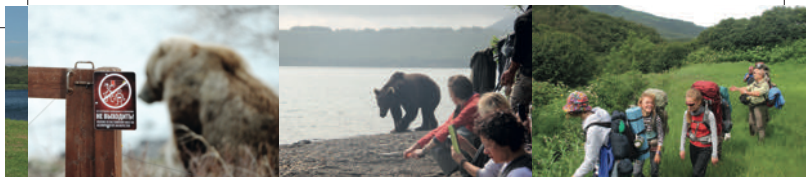
4. A bear is always looking for food

The bears of Kamchatka have only about four months to accumulate fat deposits for a long winter sleep. For this reason, they spend most of their time looking for food. Do not allow animals to associate a person with food.

Do not feed the bears and do not leave behind any garbage. Do not store food in places where you spend the night. Do not carry any strong-smelling products.

During observation of bears, never lie down on the ground or crawl or hide in the bushes. Your unusual posture – resembling potential prey – can provoke a bear to attack you.





When bears receive clear respect, they rarely pose a threat to humans. By staying vigilant when traveling in the land of bears, you can enjoy the close presence of these amazing animals without risking anyone's safety.

TRAVELLING ALONG BEAR TRAILS AND OBSERVATIONS ON NATURAL VIEWING SITES

In the South Kamchatka Sanctuary you have the opportunity not only to see wild animals engaging in their usual activities but also to immerse into their world. Walking trails allow you to get acquainted with the habitat of bears. You will see how animals transform space – build lairs, leave established trails, make marks on trees, and establish places for rest.

Remember that traveling along bear trails and away from tourist facilities – near which animals are accustomed to the presence of a person – often makes you an uninvited guest in their house!

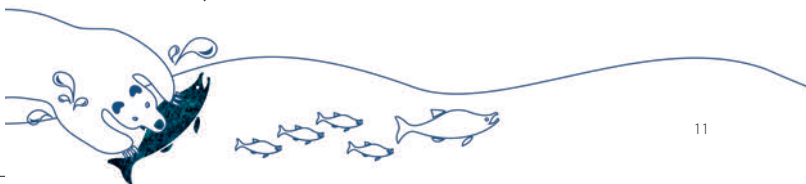
- Avoid tunnel vision and surprise encounters; be predictable.
- Avoid long stops in bears' space.
- Maintain the integrity of the group. If you need to make a stop along the route, please inform the sanctuary officer who is accompanying you.

STAY IN THE CAMP

- If you are observing animals while in the camp, observe the ethical behavior described above.
- Never leave the camp area (surrounded by an electric fence) without being escorted by a sanctuary officer!
- When observing the bear from behind the electric fence, stay at least 2 m back from the fence and at least 30 m away from the animal. Move only at a calm pace, without making sudden movements.
- If you notice a bear in the camp, immediately inform the sanctuary officer or the team leader. Do not get close to a bear!

MEALS ON THE ROUTE

- Store food in a plastic or metal container with a tight-fitting lid that prevents the spread of odors.
- Never leave food containers unattended.
- Eat food at a time when you have the smallest number of bears around you.
- Bring out only the food you are ready to eat immediately.
- If a bear begins approaching you, hide food in a container.
- Avoid leaving uneaten food in the environment – the bears will surely find it! Do not attempt to bury the remains of food. Bears have an excellent sense of smell and are able to find food at great depths. Put any leftover food in a container and take it with you.



A trip to the South Kamchatka Sanctuary will give you an amazing opportunity to come in contact with the pristine beauty of nature, to see it as it was before human intervention, to feel the power of the cycle of life and energy of Kuril Lake ecosystem, and to see brown bears in their natural habitat – in their home.

It is important that your visit does not alter the way of life of wild animals and does not violate the harmony of this place.

Following the rules described in this brochure will allow us to preserve this corner of the earth in its pristine form, to keep its animals wild, and to offer you the profound experience of communing with the wonderful world of nature.

To find out more about bear viewing and other educational programs in the territories of the Kronotsky State Nature Biosphere Reserve and the South Kamchatka Federal Sanctuary named after Tikhon I. Shpilenok, please visit our website or office at:

Federal State Budgetary Institution "Kronotsky Federal Nature Biosphere Reserve"
Kamchatsky Krai, the city of Elizovo, st. Ryabikov, 48
Tel./Fax: 8 (415 31) 7-16-52, (415 31) 7-39-05
zapoved@kronoki.ru
www.kronoki.ru

Contributors of photographs to this booklet:

AirPano, A. Gabov, S. Gorshkov, S. Kolchin, M. Korostelev, P. Postovoy, V. Rousin,
I. Shpilenok, T. Shpilenok, A. Zavadskaya, N. Zinoviev

Text: A. Zavadskaya, S. Kolchin, E. Volkova

Translation into English: F. Streibigh

Design: N. Skidan

