

RUSSIA'S GRIZZLY COAST EXHIBIT FACT SHEET

INTRODUCTION:

The Russian Far East is one of the last great wilderness areas on earth, home to an amazing diversity of animals including some of the world's largest predators. But the environment and animals of this area are in danger. The Minnesota Zoo—and the new *Russia's Grizzly Coast* exhibit—will play an important role in educating and promoting conservation of this little-known but extraordinary place.

This part of the world is a great fit for Minnesota because of similar climates—both are located along the 45th parallel. The Minnesota Zoo has a successful history in exhibiting and conserving cold-climate animals. This will be the first exhibit of its kind featuring the region, landscapes, and animal combinations of the Russian Far East.

DESCRIPTION:

Russia's Grizzly Coast will take guests on an exploration of three main areas of the Russian Far East: the Pacific coast, the volcanic north, and the forested south. Starting along the coast, guests will experience sea otters playing in the water among dramatic rock formations. Next is the volcanic land of Russia's Kamchatka Peninsula where geysers, mud-pots, and lava tubes provide a dramatic backdrop for massive brown bears. The journey continues to a place that is reminiscent of the forests of Minnesota. Heavily wooded, the southern tip of Russia is home to wild boars and two of the world's largest and most endangered cats: the Amur leopard and the Amur tiger. The exhibition then connects with the Zoo's Northern Trail featuring additional animals from northern biomes like the Asian steppe, tundra, and taiga.

HABITAT:

This exhibit covers three main habitats: the Pacific coast, the volcanic Kamchatka Peninsula, and the taiga forests of Primorsky Krai.

- Russia's Pacific coast supports some of the world's richest marine life, fisheries, and seabird diversity. Streams, rivers, and estuaries mix with the rich waters of the Pacific Ocean and the Sea of Okhotsk, creating a diverse ecosystem including some of the world's largest marine life.
- The Kamchatka Peninsula has perhaps the highest density of volcanoes in the world. Its climate ranges from temperate to subarctic with a variety of trees, mountains, and free-flowing rivers. The influence of the ocean keeps the temperature milder than other subarctic locations. Kamchatka is best known for the abundance and size of its brown bear population.
- The southern tip of the Russian Far East is mountainous and almost 80% is forested. A mix of deciduous and coniferous trees make it look similar to the woods of Minnesota. One of the few places where the forests are still pristine, this is home to the very rare Amur leopard and Amur tiger.

SPECIES:

Species included in *Russia's Grizzly Coast* are northern sea otters, brown bears, wild boars, and Amur leopards.

EXHIBIT DIMENSIONS:

Total Exhibit Size: 3.5 acres

Sea Otter Exhibit: 1,368 square feet
Pool: 34,000 gallons

Brown Bear Exhibit: 13,603 square feet
Stream: 1,800 gallons
Pool: 16,500 gallons
Trout Pond: 2,600 gallons
Total water volume for bear: 20,900 gallons

Wild Boar Exhibit: 1,932 square feet

Amur Leopard Exhibit: 2,785 square feet

EXHIBIT DESIGN:

The Portico Group, Seattle, WA

Architects:	Architectural Alliance, Minneapolis, MN
Structural Engineers:	MLA Engineering, Seattle, WA
Mechanical, Electrical, Plumbing:	Sebesta-Blomberg, Roseville, MN
Green Roofs:	Kestrel Design Group, Edina, MN
Horticulture:	Zoo Horticulture Consulting and Design, Ossining, NY
Life Support Systems:	PBS&J, San Diego, CA

Interpretive Fabrication: Split Rock Studios, Arden Hills, MN

Owner's Representative: Sterns & Associates, LLC

CONSTRUCTION MANAGEMENT/GENERAL CONTRACTOR:

Mortenson Construction, Minneapolis, MN

Rockwork:	Cemrock, Tucson, AZ
Earthwork:	Carl Bolander and Sons, St. Paul, MN
Mechanical:	MMC, Minneapolis, MN
Electrical:	Gephart Electric, St. Paul, MN
Landscaping:	Aloha Landscaping, MN

EXHIBIT COST:

\$24 million

EXHIBIT FUNDING:

State of Minnesota
Ecolab
Faegre & Benson LLP
The Toro Company
KPMG LLP

EXHIBIT FUN FACTS:

To recreate the rocky and rugged land of Russia's Far East, designers fabricated artificial rockwork throughout the exhibit. Some of the materials used to do this include:

- 49,000 pounds of rebar
- 1,200 cubic yards of structure shotcrete (a thick base of concrete which is sprayed onto rebar and lath to create a structural wall)
- 850 cubic yards of texture shotcrete (the top layer of concrete which is then sculpted and texturized by hand to create the surface of the rockwork)
- 300 gallons of paint

The logs used for the Ecolab Conservation Science Cabin are Norway spruce and Scots pine. The cabin was initially built and assembled in Karelia, Russia.

It took two and a half months to build the Ecolab Conservation Science Cabin in Russia. Once done, it was disassembled, one log at a time, and each log was uniquely numbered and coded. The logs were carefully wrapped and loaded into a 40-foot open top container. It went by truck from Karelia to St Petersburg; then by ship to Hamburg, Germany, and by ship to Montreal, Canada. From Montreal, it went by train to St Paul, and finally by truck to the Minnesota Zoo.

There are eight geothermal wells, drilled to a depth of 200 feet, for the Education Event Center. The Center, the Zoo's first truly "green" building, uses energy from the ground via a heat pump and the wells for heating and cooling the building.

The curved acrylic panels at sea otter viewing are seven inches thick for the tall panel and three and a half inches thick for the shorter panel.

The logs for the sea otter viewing shelter and the bear behavior station are lodgepole pine from Montana.

More than 780 trees were planted to create the forested landscape of the Russian Far East. The trees came from nurseries as nearby as Lakeville and Hinckley and from as far away as Chicago, Canada, and New York.

A total of 1,180 tons, or 2,360,000 pounds, of natural boulders and stone were installed throughout the *Russia's Grizzly Coast* exhibit and Central Plaza.

More than 1,700 cubic yards of concrete and steel were recycled during the construction of *Russia's Grizzly Coast* -a recycling recovery rate of 61%.