For much of its history, the Kamchatka Peninsula in remote northeastern Russia has remained largely unknown to the outside world. The first Europeans to set foot on Kamchatka, Semyon Dezhnev and Fedot Alexeyev, arrived there in the mid-1600s, and the first permanent settlement was established in 1668 by Vladimir Atlasov. Although Russians maintained a constant presence on Kamchatka from that time forward, no one knew much about its geographic relationship to the rest of the world.

ROOTS OF INVESTIGATION

In the 1730s, Peter the Great commissioned Vitrus Bering to determine whether a strait existed between Eurasia and America and to map Russia’s northeastern territories. Bering’s journeys throughout the North Pacific revealed that the Kamchatka Peninsula extended southward from the Chukotka region, the area situated directly across from Alaska via the Bering Strait, and pointed down toward the northernmost of the Kirile Islands, which themselves led down toward the Japanese archipelago. Bering also found that the Aleutian Islands reached across the North Pacific from southwest Alaska toward the peninsula, ending with the Commander Islands in Russian territorial waters. As a participant in the later Second Kamchatka Expedition, naturalist Stepan Krasheninnikov traveled around the peninsula and began recording the history and culture of the local tribes. His published accounts of these travels were the first books to describe the indigenous peoples of Kamchatka and formed the reference point for all subsequent ethnographic work carried out there.

Molecular anthropology is sent to Siberia

Sometime later, in the late 19th and early 20th centuries, Franz Boas led a series of joint Russian-American expeditions into this region of northeastern Siberia to study the biological and cultural relationships between northeastern Siberians and Native Americans. During those expeditions, known collectively as the Jesup North Pacific Expedition [JNPE], Boas and his colleagues acquired an enormous quantity of data on the cultures, languages, and biology of the indigenous peoples of the region. Until recently, much of the information remained unexamined and publicly inaccessible.

MOLECULAR AND ETHNOGRAPHIC STUDIES

Using these historical and ethnographic studies to guide our research, my colleagues and I began our molecular- anthropological analysis of the indigenous peoples of Kamchatka. We were interested in knowing where the Paleoasiatic-speaking Koryaks and Itelmen originated, when their ancestors arrived in Kamchatka, how they were related to other ethnic groups of the region (Chukchi, Evens, Yakuts, Ainu), and what their relationships to Native American populations were. We also wanted to assess the impact of Russian colonization on the size and diversity of the Kamchatkan populations, as warfare and disease had decimated them in much the same way European contact impacted indigenous groups of the Americas. In short, our research was designed to examine the prehistoric and historic influences on patterns of genetic variation in Kamchatkan native groups and to relate our genetic data with other ethnographic, archaeological, and cultural data from this region to reconstruct its population history.

In the course of our work in Kamchatka, we learned a considerably amount about the indigenous peoples and Russians who lived in this region of Siberia. We obtained much of this information simply by traveling with people to wherever they were going on any given day. Among other places, these excursions took us to fishing camps, cemeteries, administrative offices, local museums, people’s homes, and the banya (bathhouse), which turned out to be an especially good place to pick up tidbits of information about recent events and local politics.
Sometimes, people simply dropped by for a visit, such as a Koryak man from Tymlaut who wanted to sell me a rather fresh mountain sheep’s head, a journalist/poet from Palana who wanted to write a story about our research project for the local paper, and a Ukrainian hunter from Ossoora who wanted to meet an American so that this person could help him obtain a Cabel’s catalog.

Because it was summer during our visits, many people were engaged in salmon fishing. In the months of July and August, a number of Pacific salmon species return to Kamchatka to spawn in the various rivers of the peninsula. It is not surprising, therefore, that many aspects of Koryak and Itel’men cultures are oriented toward fishing, both for salmon from the ocean and for freshwater whitefish that inhabit the rivers of Kamchatka. Salmon fishing is not only important to the local people as a means of subsistence but is also a major part of the economy throughout the North Pacific region.

In 1993, we spent a lot of time visiting fishing camps that were frequenting the village of Karaga on the Bering Sea side of the peninsula. Through our travels in this small area, we saw considerable evidence that traditional Koryak lifeways were being slowly supplanted by Russian cultural practices. Along the beach fronting the Karaginsky Bay, we noted several small fishing huts used as temporary shelters. The presence of these Russian boats worked in the bay. The presence of these Russian boats worked in the bay. The men usually worked together in pairs to handle the nets, sometimes in larger numbers if the nets were large. The fishermen gradually encircled the fish with the net, pushing them closer to shore, and then finally gathered them up in the net and dumped them onto the beach.

Once netted and brought onto shore, the salmon were gutted and cleaned. The cleaned salmon were then strung together with rope made from braided grasses and hung to dry on the racks attached to the balabans. In the picture above, an older Koryak woman is stringing together the fish that her grandson caught earlier in the day, using the newly braided ropes. In the next photo, her grandson is hanging the lines of fish that she has assembled on a rack to dry. Typically, the better-quality fish were dried and then stored for consumption during the colder months of the year. Some of the fresh meat was also salted or pickled for later use. The lesser-quality fish were often used to feed the dogs during the winter, as there are few other food sources for these animals at this time of year.

In addition to this, both Koryaks and Russians actively collected the eggs from gravid females to sell as caviar. Koryaks would typically receive 10 to 20 roubles, or sometimes bottles of vodka, for a 4-liter jar of caviar from a Russian middleman, who would then resell the same caviar at local markets at a price about 10 to 20 times higher.

Fish are not the only marine resource utilized by Koryaks, at least in traditional times. Some Koryaks hunted sea lions, as well as otter and other sea mammals, for their meat and blubber. Although this practice slowly diminished in the latter portion of the 20th century, sea mammal hunting still goes on. During our walk around Koshka Island, we encountered an older Koryak woman dismembering the remains of a recently killed sea lion, cutting up the blubber to store in a jar. The blubber was traditionally used to heat oil lamps and for cooking, and she was probably going to use it for both purposes.

Along with fishing, a significant segment of the Koryak population maintains reindeer herds. These groups live mainly in the interior of the peninsula, especially in the northern regions of the Karatschnik. According to ethnographic sources, the Koryaks adopted this subsistence practice several hundred years ago under the influence of Tungusic-speaking Evas. I had anticipated being able to see some of these herds by flying farther into the interior of the Kamchatka peninsula. Unfortunately, when we reached this particular Koryak camp, all the reindeer herds belonging to its residents were being tended on the tundra near the interior mountain range, where they graze for most of the summer. However, there was clear evidence that a reindeer had been recently slaughtered.

In molecular-anthropology studies, researchers examine the genetic variation present in human groups to better understand their population history. Most now analyze two nonrecombining genomes, the genetically inherited mitochondrial DNA (mtDNA) and the genetically inherited Y-chromosome, to obtain a broader view of the genetic history of human populations. These genomes possess a series of different mutations in different people, and they are inherited from the mother and father, respectively.

We investigated the genetic prehistory of two Kamchatkan populations, the Koryaks and Itel’men. Our analyses revealed that Koryaks and Itel’men are not genetically closely related to Native American populations, and, in general, exhibit stronger genetic affinities with eastern Siberian and East Asian populations than with those of the North Pacific Rim. In fact, Kamchatkan groups share several maternal and paternal lineages with populations from the Lower Amur River region, suggesting possible common ancestry for these groups. Our results support the view that Paleoasian tribes originating in the Siberian mainland near the Sea of Okhotsk expanded into Kamchatka relatively recently (~6,000–8,000 years ago), although remnants of ancient ancient populations that gave rise to the Chukchi, Eskimos, and Aleuts may have been absorbed by ancestral Koryaks and Itel’men.
because parts of the animal were being dried for later use by members of the camp. I can unequivocally state that reindeer is the best meat that I have ever eaten.

**PERSPECTIVES FROM THE KAMCHATKA PROJECT**

This is necessarily a brief sketch of the population history and culture of the indigenous peoples of Kamchatka. However, it does provide a reasonably thorough description of the way of life in the rural areas of the KAR during the time of our field expeditions. It should also be noted that both Koryaks and Itel’men are attempting to reinvigorate their cultural traditions while, at the same time, finding the means to sustain themselves economically in the ever-changing sociopolitical environment of Russia.

**AUTHOR’S NOTE**

Members of our collaborative team included Drs. Rem Sukernik and Elena Starikovskaya from the Institute of Cytology and Genetics in Novosibirsk, Russia, and Dr. Douglas Wallace from the Center of Molecular Medicine at Emory University in Atlanta, Ga. As part of this project, my colleagues and I carried out two separate field expeditions in different parts of the Koryak Autonomous Region in Kamchatka (page 41). During these expeditions, we gathered information about the history of this region through interviews with local residents and administrators, and through Russian Orthodox Church records. For our genetic analyses, we collected blood samples and genealogical information from our study participants. Following this work, we flew back to the Center for Molecular Medicine and began our molecular genetic studies of DNA extracted from the blood samples. While these studies revealed much about the history of the Koryaks and Itel’men, on which we published in the *American Journal of Physical Anthropology* in 1999, most of this article focuses on the information obtained during our work in Kamchatka.

Theodore Schurr has spent the past 14 years investigating the genetic prehistory of Asia and the Americas through laboratory studies of mtDNA and Y-chromosome variation in Asian, Siberian, and Native American populations. Schurr serves as an associate editor for the journal *Current Research in the Pleistocene*, and as a scientific consultant for Family Tree DNA. He is currently an assistant professor in the department of anthropology and a consulting curator of the Physical Anthropology Section of the Museum.

**FOR FURTHER READING**


