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The Upper Paleolithic of the Maritime Region in the Russian Far East
By J. Christopher Gillam and Andrei Tabarev

In recent years, Dr. Andrei Tabarev of the Institute of Archaeology and Ethnography in Novosibirsk, Russia, and colleagues from Vladivostok, Khabarovsk, Komsomol'sk-on-Amur, and elsewhere have recorded numerous obsidian (volcanic glass) quarry sites and habitation sites dating to the final Upper Paleolithic (ca. 20,000-10,000 years ago) at the end of the last Ice Age (late Pleistocene). Sometime after 20,000 years ago, humans established themselves in the river valleys of the interior rolling mountains and coastal zone of the Maritime Region in the Russian Far East (Fig. 1). These people lived in small, extended family groups known as bands that probably consisted of fewer than 100 individuals per band. Archaeological evidence suggests that they were a society practicing a hunting, fishing, and gathering way of life (hunter-gatherers).

The climate during the late Pleistocene was colder than today, but the region was not glaciated due to cold, dry winter air that penetrated from Siberia in winter and the relatively warm, moist air from the Sea of Japan and Pacific Ocean in summer. The temperature contrast between winter and summer was probably greater than that of today presenting these early populations with marked seasonal changes in their environment. They were likely mobile populations in warm months moving between the coast and mountain zones on a seasonal basis and focusing their way of life on the region's numerous river systems. Land mammals, seasonal salmon runs, and vegetation in the river valleys probably offered abundant resources on a seasonal basis. The abundance of the warm months was likely met with harsh, dry winters that required the storage of food to last throughout the year. Thus, warm months were likely spent moving from place-to-place to gather abundant resources, whereas the winter months may have been largely sedentary reflecting the use of stored foods.

The stone tool (lithic) technology of the region was complex and shares many technological traits with the Paleoindian and Archaic period toolkits of North America. Wedge-shaped microblade cores, conical blade cores, burins, scrapers, and crude bifaces are common in archaeological sites of the region (Fig. 2). Many of these same tool types have been found in the late Pleistocene- and early Holocene-age levels of the Topper site here in South Carolina. High quality obsidian pebbles found in streams of the interior zone were used for the production of stone tools. These small obsidian cobbles were modified using a technique called bipolar reduction and the use of wedge-shaped microblade cores. These techniques produced microblades, multi-facet burins, and scrapers. Primitive bifaces were also produced using large flakes and direct percussion of the cobbles. These obsidian quarry sites are typically at higher elevations than seasonal habitation sites that are not associated with obsidian sources.

Now that the lithic technology and cultural chronology of the region are better understood, research interest is shifting from culture history to understanding the migration, interaction, and exchange...
networks of the region. The initial objective of this research is to physically connect the occupation sites and the obsidian source sites throughout the region. This type of geographical research can be conducted using a Geographic Information System (GIS). Using archaeological data provided by Dr. Tabarev (and colleagues) and geographic data from the U.S. Geological Survey (USGS), I have begun to explore the potential paths connecting the habitation sites and obsidian sources throughout the region. Preliminary analyses using least-cost paths analyses illustrate potential corridors of movement from obsidian sources to occupations sites throughout the region (Fig. 3).

The next phase of the project will involve participation in archaeological fieldwork and building a temporal database for each occupation site and obsidian source dating to the final Paleolithic. Fieldwork will be conducted in August 2003 with Russian and Japanese colleagues at two sites in the Illistaya River Basin. The first site, Gorbatka-3, dates to around 13,000-11,000 years before present (final Paleolithic) and is believed to have been a seasonal base camp. Obsidian tools from this site include microblade cores, transverse burns, and bifacial knives, points, and drills. The second site, Osinovka, has a final Paleolithic occupation similar to Gorbatka-3, but also has a controversial component of crude pebble tools dating to 35,000-30,000 years ago. If the hypothesized pebble tools are cultural, then Osinovka is by far the oldest known site in the region.

Private donations are being sought to support the initial phase of the research until grant funding can be acquired. A tax-deductible donation can be made payable to the USC Educational Foundation to support this research. Please note “Paleolithic Connections” on any contributions and send c/o Chris Gillam, SCIAA-CLA-USC, 1321 Pendleton Street, Columbia, SC 29208; (803) 777-8044; <gillam@sc.edu>. A report on 2003 Information System (GIS), Using Osinovka, has a final Paleolithic fieldwork and a donor acknowledgment will appear in a subsequent issue of Legacy.