

Use of obsidian resources for education and tourism in Shirataki geopark, Japan

Yoshifumi Matsumura , Naoto Seshimo (Engaru Town)



Abstract

The Shirataki Geopark was authorized with Japanese Geoparks in 2010. The theme of Shirataki Geopark focuses in harmony of earth science and human history, and we deeply imagine unique volcanic activity that formed obsidian and prehistoric people who survived in the Last Glacial Maximum in various environmental setting of the Shirataki Geopark area. At Shirataki Geopark, geotourism and educational activities are being carried out using the abundant geological and cultural site related to obsidian. It is important for this activity to maintain sustainable development while conserving obsidian resource.

Introduction of obsidian resources in Shirataki geopark

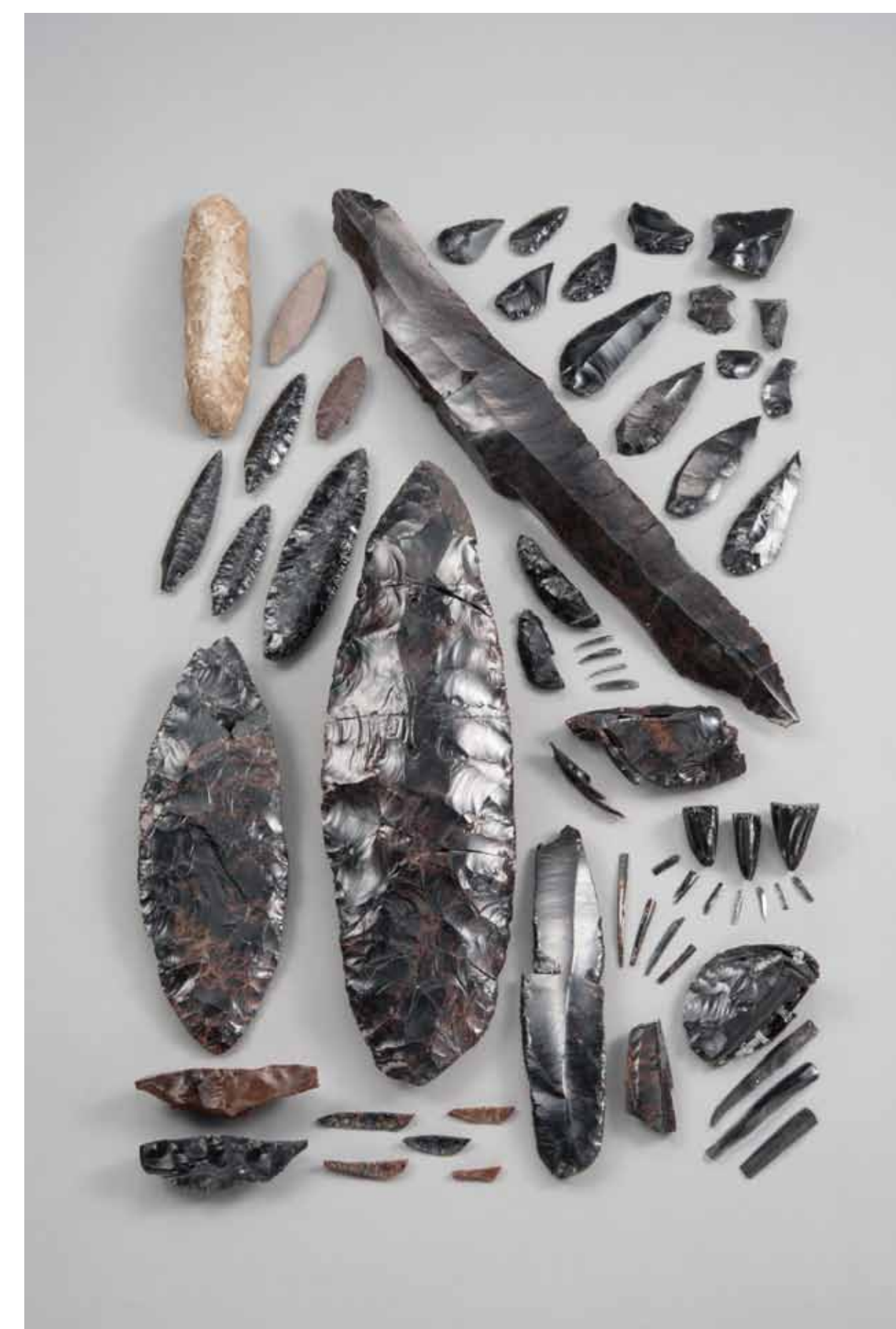
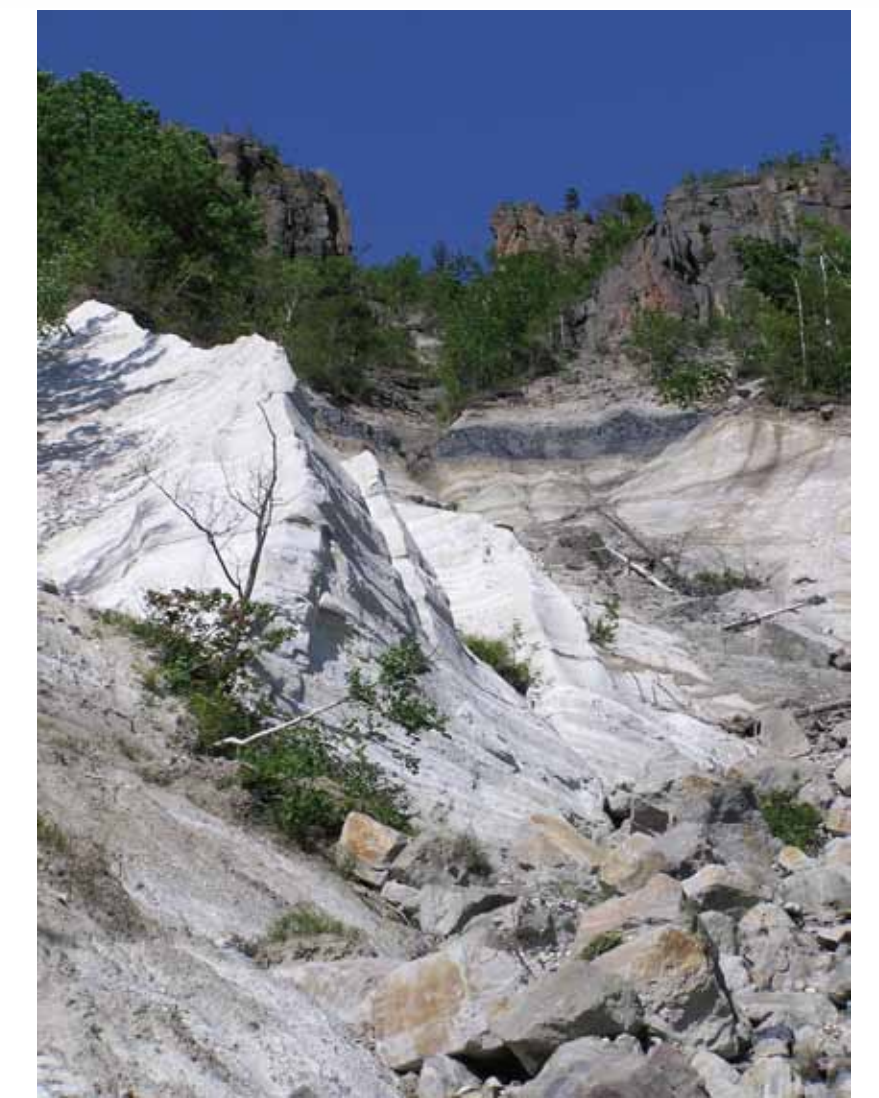
The Shirataki Geopark is characterized by some complete exposures of the compact obsidian layers, which are always developed at outer part of single rhyolite lava. The outer compact obsidian zone makes remarkably fresh obsidian with one of the best quality and quantity in Japan. For this reason, Shirataki obsidian provided the most important source of stone artifacts in Hokkaido. Stone tools made of Shirataki obsidian have been excavated from quite a large number of prehistoric sites in Hokkaido. They have even been found as far away as Sakhalin, northern Tohoku and Kurile Islands, suggesting extensive prehistoric distribution networks of obsidian. The Shirataki sites are designated as a national treasure due to the number of obsidian artifacts and features of stone tool production found there.

Educational and tourism activities

Educational programs are offered in a variety of formats, including guided hikes, field trips, workshops, exhibitions, and lectures. Local experts and geologists provide participants with opportunities to share their expertise and learn through hands-on experiences. It provides participants with opportunities to share archaeological and geoscience knowledge and learn through hands-on experience. We are also developing tourism that packages local industries and these

Conservation activities

At Shirataki Geopark, we carry out activities to conserve the limited obsidian resources. Engaru Town and the Ministry of Agriculture, Forestry and Fisheries are collaborating for the purpose of regional development through preservation of geological heritage and education and tourism. We consume obsidian resources for our educational activities, but recycle whenever possible. At the same time, as a material similar to obsidian, we also have a stone tool making experience using glass.



Education, Tourism, Conservation. We are aiming for sustainable activities by making good use of these.