The model site to learn long-term ecological succession even for short-term visitors

SHIRO TSUYUZAKI - *Graduate School of Environmental Earth Science, Hokkaido University, Sapporo 060-0810, Japan*
<tsuyu@ees.hokudai.ac.jp>

Mount Usu, northern Japan, is one of the most active and unique volcanoes in the world, and therefore has been assigned as the Toya Caldera and Usu Volcano Global Geopark since 2009. The geopark contains numerous sites for education, tourism, science and culture in terms of geology (sensu lato). Of these, we introduce a model case to learn real long-term ecological succession for short-term visitors through the geopark. Because the major eruptions occurred in distinct locations in 1910, 1944 and 1945, 1977 and 1978 and 2000 on Mount Usu, various successional stages for a century are provided in a convenient-sized area for worldwide visitors to realize successional sere, even if the visit duration is short.

The networks of footpaths and mountain trails have established access to each geosite. For example, we see well-developed broad-leaved forests in the late stages of succession along the footpath of Mount Yosomi that was created by the 1910 eruptions, and baregrounds-grasslands in the early stages along the footpath of Mount Kompira that was formed by the 2000 eruptions. These two sites, and more, can be visited within a day if desired. Volcano meisters and other tour guides, selected from the residents, properly introduce the geological and ecological characteristics of geosites with commentary boards, textbooks and/or guidebooks. In addition, the observations of successional sere can be incorporated in the education for students.

The landscape is not only for the learners of succession but also for everyone interested in diverse nature in Japan, in particular, Hokkaido. Everybody will understand the nature and succession without the sufficient knowledge of geology by the eyes. In conclusion, the Toya-Usu Global Geopark is a convenient and outstanding tool for learning the Ever-changing Earth through the succession.

Presented in Theme 1

doi: 10.4138/atlgeol.2014015