# From "Making an original rock specimen" co-development to geopark collaboration

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### Introduction

A program to paste identified rocks on exclusive sheets and to make rock specimens (Ohno, 2014 JpGU) is carried out in several geoparks. Participants listen in virtual tour format on the relationship between rock, ecosystem and people, paste rocks on dedicated sheets, and aim for completion of rock specimens. Because the main participants are children, it can be a great opportunity to advertise geoparks to people of various age groups and have interest.

Mt. Kurikoma Area Geopark developed my geopark version of this program in 2016. It was first carried out in "Science Plus (sponsored by Tohoku Polytechnic College)" in October of the same year. We participatied in "Science Agora" since 2016, along with Choshi, Shikokuseiyo, Mine Akiyoshidai, Oitabungo-ohno and Amakusa Geoparks. After that, we also implemented this program at local events and school education places. And we developed and demonstrated this program in collaboration with Sanriku Geopark in July, 2017 and Yuzawa Geopark in January, 2018.

In this report, we discuss the possibility and effectiveness of "Making an original rock specimen" jointly developed and implemented with Sanriku Geopark and Yuzawa Geopark.

#### Example 1 Collaboration with Sanriku Geopark

Sanriku Geopark and Mt. Kurikoma Area Geopark have geologic bodies of different eras, and from the difference between coastal area and inland area, their own culture and living were born. In cooperative development with Sanriku Geopark, participants learn the characteristics of each area from the viewpoint of geology, and made contents to consider about culture, living, disaster and disaster prevention caused by geology and topography.

This content was carried out in "Children's Environment Exploration Corps in Sanriku Area (Hosted by National Hanayama Youth Outdoor Learning Center)" held in July, 2017, and 45 children centered on the northern part of Miyagi Prefecture participated.

## Example 2 Collaboration with Yuzawa Geopark

Yuzawa Geopark and Mt. Kurikoma Area Geopark have the geological history of the formation of the Ou mountain range centered on the Kurikoma and Onikobe volcanoes, but because they are located in the east and west across the mountain range, a distinctive culture due to climate differences was created in each area. In cooperative development with Yuzawa Geopark, participants attached rocks related to the developmental history of the Ou mountain range, learned about the activities of people nurtured and cultural exchanges by the benefits of geology and topography, and made contents that wanted to visit each region.

This content was carried out "Tapio Univercity" and "Mt. Kurikoma and Yuzawa Geopark Festival" in Sendai-Izumi Premium Outlets held in Janualy, 2018, and 62 people participated.

#### Effectiveness of this program through joint development

We jointly developed and implemented this program with Sanriku Geopark and Yuzawa Geopark. Among

them, we think that we can capture ecosystem, people's activities, building stories and talking related to geology and topography difficult to complete with a single geopark from a new viewpoint and reflected it in our efforts. Then, when this program was implemented with multiple geoparks, we could have the opportunity to notice and imagine the participants and have experienced how to enjoy the geopark.

Keywords: geopark, Making an original rock specimen, Mt. Kurikoma Area Geopark, Sanriku Geopark, Yuzawa Geopark