Fails of Shirataki Geopark –Why our geopark received a “yellow card” on the revalidated process-

*Makoto Kumagai[1], Kyohei Sano[1], Takashi Nakahara[1]

1. Shirataki Geopark promotion council

Shirataki Geopark, northern Hokkaido, Japan, was validated as National Geopark on 2010. However, on the revalidation process on 2014, we were informed to take appropriate steps within a two-year period (so-called “yellow card”). Then, on 2016 we were revalidated as National Geopark for a further four-year period (so-called “green card”).
After the revalidation process on 2014, we took an appropriate step to solve the problems about “examination of management structure” and “institution of master and annual plans”. In this study, we summarize the reason why our geopark received a “yellow card” on 2014, and how efforts we took to develop our geopark during 2 years.

Keywords: ravalidation process, yellow card, working team

The introduction to actions taken by the Tokachi Shikaoi Geopark office

*jun onishi[1]

1. Tokachi-Shikaoi Promotion Council

“Tokachi Shikaoi Geopark" was certified as a Japanese Geopark in December 2013. Although, four years has past, we are seeking the answer to “What is the Geopark?” ,how to take advantage of the Geopark for city planning, and the ideal model of the Geopark. Now we will introduce the actions taken by Tokachi Shikaoi Geopark office.

Keywords: Geopark, Regional Development

The joint effort to promote community study in Mikasa Geopark

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1. Mikasa geopark Promotion Council, 2. Regional Development and Gopark Promotional Council

Starting in 2005, elementary and middle schools in Mikasa City added ‘regional studies’ to the curriculum to educate local children about their city. This subject aims to nurture children’s physical and intellectual abilities and deepen their understanding of local history and culture. In conjunction, since its certification as an official Japan Geopark in 2014, Mikasa Geopark has made strides towards developing a sustainable city through the implementation of guided tours, educational programs, etc. The schools in Mikasa City and Mikasa Geopark share the same goal: to cultivate our country’s future by broadening children’s awareness and appreciation for their environment—cultural, historical, and physical.

To foster a connection between our schools and the geopark, and to promote ESD (Education for Sustainable Development) and geopark community outreach programs, we established the ‘Mikasa Geopark ESD Promotional Council’, consisting of people from internal and external associations. We made a ‘community study calendar’ to compile the subjects which relate to the geopark in the school curriculum.

The goals of this effort are (i)to organize regional materials, including geopark materials, so that teachers and students can use them for community study, (ii)to deepen mutual understanding and increase our relationships, and as a result, (iii)to establish a shared foundation of developing human resources.

In this presentation, we will discuss the background, progress, and achievements of our efforts. We will also discuss future issues.

Keywords: school education, geopark activities, cooperation, community study, ESD

Educational activities of Mt. Apoi Geopark

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1. Samani town office

Mt. Apoi Geopark

Keywords: geopark, Mt. Apoi, school education

The lineup of the Toya-Usu Geopark Story Card

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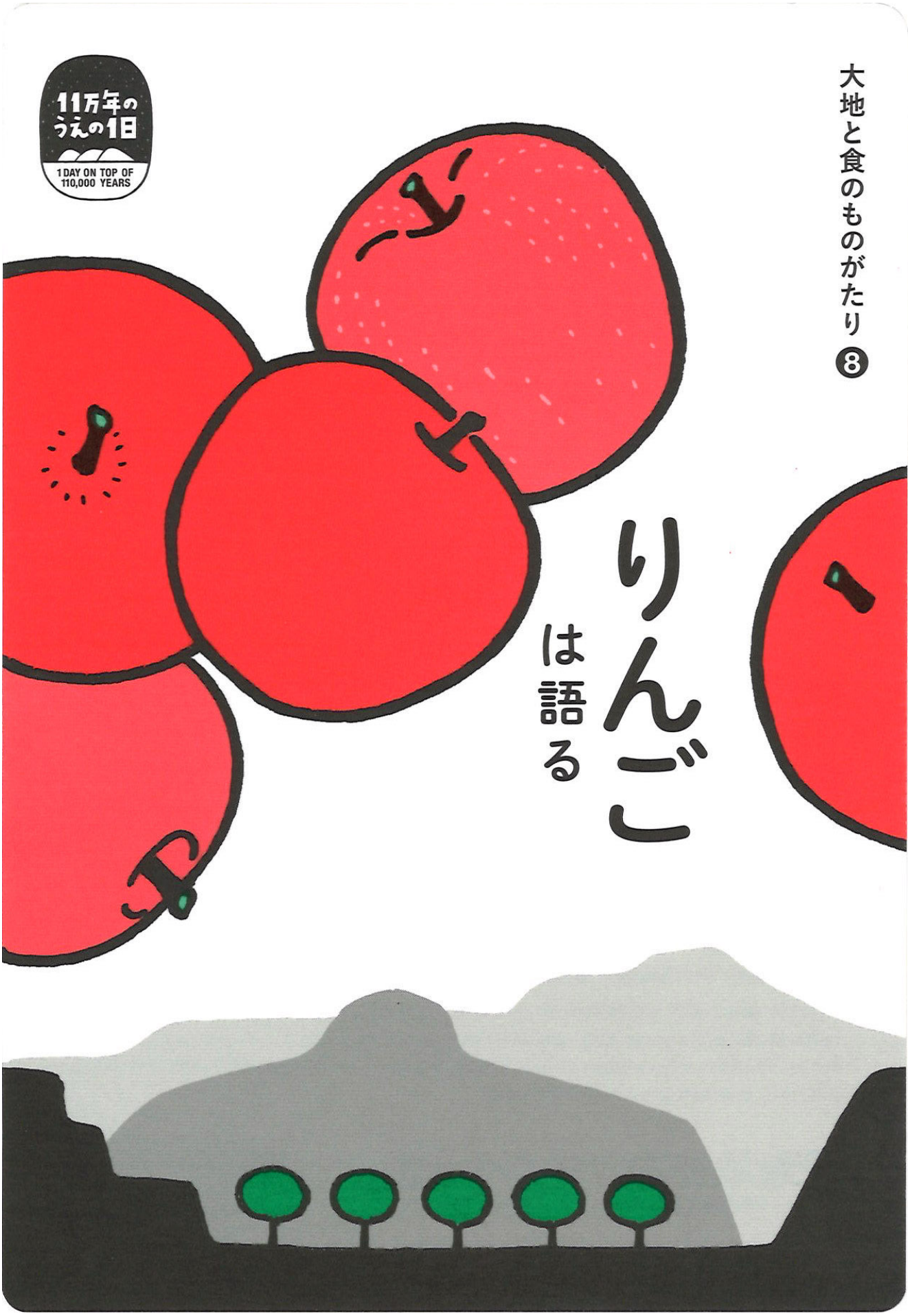
1. Toya Caldera and Usu Volcano UNESCO Global Geopark, 2. Hokkaido Research Organization, Geological Survey of Hokkaido, 3. sesensitka

Toya Caldera and Usu Volcano UNESCO Global Geopark is a volcanic geopark located in Hokkaido in northern Japan. We can find a lot of hidden tales "Geo-Stories", associated with the activity of the living Earth when we focus on the different aspects of local industry, people's livelihood, and the natural habitats of living things in our geopark.
In 2014, Toya-Usu global geopark produced the picture book Toya-Usu Global Geopark Storybook "1 DAY on top of 110,000 YEARS" in order to comprehend the relationship between the worlds above and under the ground world. It is edited to include easy-to-understand text and illustrations to reach local people of all ages. And we produced "The Geopark Story-Big-size-book ", "The Geopark Adventure Cards", "The Geopark Tote Bag", and "The Geopark Product Story Cards (six products)" in 2015. We are promoting our geopark in a broad range by using these products based on the world view of the picture book and hopefully we can l*et all* the residents know our "Geo-Stories".
Moreover, 14 kinds of Geopark Product Story Cards published in 2017. Taken together with 6 cards published in 2015, a total 20 kinds of Story Cards of agricultural and fishery products we have. We are using the story cards as special gift for customer of product market or an enclosed message card of a product delivery package. The story cards have been helping to improve a commercial value of local products. We introduce the lineup of the cards and telling the way how we overcame a failure we faced during the publication process.

Keywords: harvest from the Earth, geopark, geo-story, volcano



Yakumo mine and Oboko mountain - The tentative plan for "Yurappu Geopark"

*Shigeyuki Oya[1], Takayuki Kato[2], Shizuka Takahashi[1]

1. The Association of Geopark Plan, in Yurappu, 2. Earth Science Co.Ltd

Yakumo-cho is a town that has the chief industries of the dairy farming and the fishery which owns the two seas of the Pacific Ocean and Sea of Japan, being in the narrowest part in Oshima Peninsula.
Since 2012, it is doing an activity while the geopark conception preparatory meeting of the private base gets the support from Yakumo town, too.
The tentative plan for Yurappu Geopark is in the process of being selected geo-site Yakumo in the entire as its range.
This time, I want to introduce geo site to Yakumo mine and Oboko mountain.
1: When flourishing as a mine.
2: Oboko mountain nature.
3: Possibility of geothermal power generation.

Keywords: Geopark

Management and evaluation of local heritage in Yuzawa Geopark

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1. Yuzawa Geopark Promotion Group

Yuzawa Geopark has 379 “Geopoints” and 16 “Geosites”. We defined Geopoint as “the geology, landscape and scenery of earth scientifically importance”, “the cherished landscape, scenery, historical monuments and place, custom and tangible and intangible cultural property of local people” and “the shilling place and thing for tourists”. Geosite is defined as the area that has some Geopoints with a common theme. These definitions are different from the Geosites expressed by the UNESCO Global Geopark Network and the Japan Geopark Network. We are required to consider these definitions.
The Geopoints and Geosite of Yuzawa Geopark ware defined based on scientific research by Network of Earth Science Museum in whole Akita Prefecture. We defined many local heritages as Geopoint because we want local people to rediscover the value of Yuzawa city.
In order to unify the definitions of "Geosite" in all over the world, the Geosite of Yuzawa Geopark should become equivalent to the Geosite defined by UNESCO Global Geopark Network. Defining cultural heritages as geosites makes us confused. However, the places and things that were not defined as "Geosite" are not without value. When they are defined as Geosite, they may become objects of scientific research and conservation. In this presentation, we will discuss the management and evaluation of local heritage based on activity of Yuzawa Geopark.

Keywords: Geopark, Geosite, local heritage

Activity Report of the Snow Country Geoparks Forum 2017 in Yuzawa Geopark

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1. Yuzawa Geopark Promotion Group

Yuzawa Geopark is in a heavy snowfall area. We can not to go to Geological site in winter because of the heavy snow. The best part of Geopark is to feel the earth with five senses. The heavy snow disturbs the activity of Geopark. However, this is also a resource for tourism in limited time and area. The Snow Country Geoparks Forum was held to discuss how to increase the number of tourist in winter since 2016. In order to utilize snow as a resource, it is necessary to develop some sightseeing programs in winter, and build capacity to conduct the programs. We invited two speakers to talk about how to plan and to public geotours, and about risk management in geotours in winter. At the workshops in the forum, the participants discussed about the above theme. We obtained honest feedback by the participants at excursions of the forum. It is necessary to be prepared to walk on the snow, to help people who are unfamiliar with the snow, and to develop an emergency plan on the snow road. We should research what kind of people feel worthy of the snow, and how to convey the information to them. In this presentation, we will report the forum and discuss the tourism in winter.

Keywords: Geopark, Snow Country Geoparks Forum

Getting over Geo Park Areas
A Geo Tour Tracing “Asaka Flume” from its Source, Bandaisan Geo Park

*Hiroshi Sato[1]

1. Mt.Bandai Museum

One of geographical features of Bandaisan Geo Park is lakes and marshes which were formed by land abalanche of Mt. Bandai eruption. And we have often held geo tours taking advantage of these water resources.
Meanwhile, the water flowing from the lakes and marshes runs through other communities like Koriyama city into the sea as rivers. One of the rivers was kept up as “” Asaka Flume” which was identified as a Japanese Heritage Site last year. Koriyama city aims to make use of it as tourist resouces.
So, Bandaisan Geo Park is planning diversified geo tours over a wide area in collaboration with Koriyama city.

Keywords: Getting over Geo Park Areas, regional collaboration

Promoting Sado Island Geopark while considering the local residents

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1. Sado Geopark Promotion Council

In order to promote a geopark, we need to consider opinions and thought of local residents and to work together with them. To that end, it seems to be necessary to create an environment with mechanisms that facilitates the exchange of opinions among the residents, specialists and the members of the promotion office. It takes time to create a geopark having committed residents and it might not give results before several years. However, the commitment of the residents makes them realize that they are responsible for its development. As a result, this enables to create a sustainable geopark. With this in mind, we will introduce the effect of the meetings with the local residents held by the Sado Geopark and then, our future plans.

We enter the area, organize the field trips and explain the concept of geopark to the local residents. We rediscover the charm of the area with residents and make proposals such as tours focusing on the relationship between Earth and the life of the people. We believe that it is necessary to include in our proposals not only our knowledge about the geology but also many charms existing in the area, for example its culture. The residents' awareness of geopark within Sado Island is still low. Therefore, the promotion office offers several briefing sessions to the local residents since 2015. We attend the community meetings and there, explain the geopark to the residents. At first, it was aimed to familiarizing them with the concept of the geopark. However, unexpectedly, we received ideas from several villages such as We will cut grasses at the geo spots and We want to try a geo tour with the view from the ocean. and so on. There are villages where concrete efforts have been initiated, such as the road maintenance on the way to the geo spots. This suggests that the residents have realized the value of their area and started their actions. Especially, in the Sawasaki district on the Ogi peninsula, the stairway maintenance was carried out mainly by the residents. This stairway leading to the coast had been neglected for more than 30 years and was covered with grass. After that, we walked around the coast and the area with the residents and realized again the value of the region. In the spring, we plan to carry out a tour organized mainly by the village related to the Natural *Iwanori* that can be collected on the coast.

Geoparks can be used for sightseeing. However, it depends on each village for what they aim when using geoparks. We visit villages and there, explain how to use the geopark in Sado Island while introducing the examples of other geoparks. If there is a demand from the residents to use the geopark for sightseeing, we believe that it is the role of the promotion office to help them create that mechanism.

We plan to continue to organize meetings with the local residents. Geoparks are used for various things such as tourism, education and community building, but we should not ignore the collaboration and the voluntary efforts of local residents for its success. Regarding the promotion of the Sado Geopark, it is necessary to always consider the residents for our activities.

Keywords: Sado Island, Geopark, local residents

About the report of the research and activities on the Naeba-Sanroku area

*SATO NOBUYUKI[1]

1. Naeba San-roku geopark promotion council

1.Discovery of the volcanic ash layer of the Shikumi river basin
A fresh outcrop (stratum) appeared along with the canal construction work within the Momonoki in the Tsunan Town, prefectural road Ketto-Kamigo strait line in August, 2016. Because it was an interesting geologic pattern, we invited experts, observed the formation, gathered samples and recorded strata.
2.Transition of nature in Suganuma area
Suganuma village is located in the northern part of Mt. Naeba foothills at an altitude of 630 to 650 m. It is where became a waist village about 50 years ago.
As the name of Suganuma, the area is a terrain and geology where water tends to stay. There have been almost unspoiled ponds, wetlands and forests since becoming a waste villageMany mammals and birds, including dragonflies, could be confirmed. Several endangered species have also been found.
Many materials to be left are left, including shellfish and lignite. Continuous investigation is required for gradual transition from wetland to forest.
3.Activity at Naeba-Sanroku geopark
Report on activities at Naeba-Sanroku geopark.

Keywords: Discovery of the volcanic ash layer of the Shikumi river basin, Transition of nature in Suganuma area , Activity at Naeba-Sanroku geopark

Operation and challenge by Geonet Hitachi, North Ibaraki Geopark

*Michio Tagiri[1], Katsutoshi Hanawa[2], Akira Oikawa[2], Makoto Murata[2]

1. Hitachi City Museum, 2. Geonet Hitachi

Many civilian interpretative guides from Hitachi City have played an active part in the North Ibaraki Geopark since it opened in 2011. At first, the role of Hitachi City was as a passive observer of the Geopark, and so the Hitachi City Office did not recognize Geonet Hitachi as an official entity. However, following continued requests from the interpretative guides, Hitachi City became a regular member of the Geopark. Here, we report the operations of Geonet Hitachi over the past year.
Geonet Hitachi has been an active participant in many public relations and educational events organized by Hitachi City to promote the Geopark to citizens and students. As examples, the interpretative guides acted as guide and stewards during a public hike events, Geonet ran educational booths for the general public at the Hyakunen-Juku Festival and for students at a science festival, interpretative guides assisted at the summer geo-school at Hitachi City Museum (on four occasions), and Geonet set up a booth at an event organized by the community centers of Hitachi City. Geonet compiled a set of rock and fossil specimens from the Hitachi Cambrian Formation, and this has been presented to all the junior high-schools of Hitachi City as a travelling display. In addition, the interpretative guides frequently collaborated with the other geonet groups of the North Ibaraki Geopark as a guide and as a partner in the Geopark.
The members of Geonet Hitachi have attended bimonthly lectures and taken part in several field excursions that have enable them to increase their knowledge of the Hitachi Geosite. Bimonthly meetings are held for the purposes of event planning and organization, and the financial accounts have been presented at the meeting. With 37 interpretative guides, Hitachi Geonet is the largest Geonet group in the North Ibaraki Geopark. Many of our members have lobbied the Hitachi City Office for increased support of the Geopark.
There is ongoing scientific research into the Cambrian Formation at the Hitachi Geosite. Geonet Hitachi has undertaken geological studies and published reports (Tagiri et al., 2015 & 2016) on the Hitachi Cambrian Formation. Cambrian fossil data from the Hitachi Geosite are currently held by the Geonet Hitachi.

Keywords: Geonet Hitachi, North Ibaraki Geopark, Hitachi Cambrian Formation, Cambrian fossil

Ibaraki university students' regional contribution on North Ibaraki Geopark & Mt. Tsukuba area Geopark

*keisuke yamamoto[1], Rika Imaizumi[1], Fumitaka Endo[1], Ibuki Sugino[1], Shintaro Otomo[1], Toshifumi Koseki[1], Shohei Shibata[1], Shingo Sugawara[1], Shota Watanabe[1], Kazuki Kidoguchi[1], Taiga Suzuki[1], Mamoru Koarai[1]

1. Faculty of Science, Ibaraki University

Ibaraki University Geological Information Utilization Project consists of Ibaraki University students who interested regional contribution by geology. Our project team mainly support North Ibaraki Geopark using geological information that was not well known generally.
Until 2016, we published geo tourism maps of 15 sites of North Ibaraki Geopark and performed geo tours using these maps. Furthermore, we committed North Ibaraki Geopark Promotion Council and drew maps and signboards, and assisted geo tours. In October or November 2017, North Ibaraki Geopark is examined by Japan Geopark Network (Hereinafter called JGN). We will produce information about geology and the student's point of view to be recognized by JGN. Moreover, Mt. Tsukuba area Geopark was newly admitted to JGN in 2016. So we will also cooperate with Mt. Tsukuba area Geopark, extent our activities and contribute to the region through using information of geology. The performance is as follows.

The activity in 2014

1. Producing a North Ibaraki Geopark promotion video

We collaborated with a professionalcameraman, Tsukuba Bank and local governments. The PV can introduce geological feature of North Ibaraki area byaerial video. The PV is screening at branches of Tsukuba Bank, the North Ibaraki Geopark Satellites, and several events.

2. Producing a North Ibaraki Geopark official product Geodora

The North Ibaraki Geopark official product Geodora was produced in partnership with Kamejirushi Corp., Kasumi Corp., Seibu Corp., a designer, and North Ibaraki Geopark Working Group. The action was paid attention by mass medium, and raised Geopark awareness.

3. The compilation of Geo guide manual in region of Kasama

We collaborated Geo guide manual with Kasama City, which is in region of Kasama of Mt.Tsukuba area Geopark. We provided geological information about two geosite which is the Kasama Basin geosite and Inada and Fukuhara geosite. In addition, we performed the student's point of view at workshop when we participated the Geotour of using tentative Geo Guide Manual. Hereafter we will also cooperate with Mt.Tsukuba area Geopark.

The plan for 2017

4. Activities toward recertification of North Ibaraki Geopark

The North Ibaraki Geopark has been conditionally recertified at the 25th Japan Geopark Committee's examination held in 2015. In case of recertification, the improvement of geo tourism maps was required. Therefore, we will collaborate with interpreters and local governments to provide academic support for creating new maps.

Keywords: North Ibaraki Geopark, Mt.Tsukuba area Geopark, Regional Contribution

Our efforts to establish sustainable local development measures by using Grant for Regional Revitalization Acceleration

*Toshitsugu Shibahara[1]

1. Mt.Tsukuba Area Geopark Promotion Association

In 2016, Mt. Tsukuba Area Geopark Promotion Association received “Grant for Regional Revitalization Acceleration” and implemented “Integrated Marketing for Mt. Tsukuba Area Geopark Promotion” so as to make people visit the geopark and activate the local economy.
As the integrated marketing,we did five operations:
1. Survey analysis to establish strategy
2. Establishment of promotion activity
3. Planning and development of tour
4. Design of a specialty
5. Publication of brochure
In the process of these operations, we realized that local people’s recognition of Mt. Tsukuba Area Geopark is not satisfactory. Therefore we started with people inside the area and let them get involved.

As a next step, we send information and message outside using products of the integrated marketing and keep working for a realization of sustainable local development.

Field trip and its effects at Byobugaura for elementary 6th grade in Choshi

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1. Board of Education, Choshi City Hall, 2. Choshi Geopark Promotion Council

Choshi city has a basic education policy (drawn up in February 2016) to encourage the creation of citizen’ s sense of culture by promoting the activities of Choshi Geopark, and they facilitate school education for students to be able to grow with pride in their hometown. In response to this, Choshi City has guidelines on school education (2016 edition) that there should be hometown learning which utilize the characteristics of the schools and the local areas through learning support of Choshi Geopark in the form of field trip outside the school.
At the Choshi Geopark Promotion Council, in February 2016, we provided support in the form of field trip to Byobugaura for 6th grade students in Choshi City. After that, we conducted a questionnaire survey on how effective the learning support for children through this field trip learning. This is to report the result of this questionnaire survey.
The content of the support was based on a chapter called "Formation and change of land" of science used in the elementary schools in the city. As for the support method, while the students have field trip to Byobugaura, a geologist who is one of the authors explains the outline of the formation and change of Byobugaura. The certified geo-guide of Choshi Geopark Promotion Council also explained more specific phenomenons and other information in relation to the geopark. The support time is basically one hour.
After every field trip, we handed out questionnaires to the teachers and asked them to let students fill in the questionnaires. There are totally 459 elementary school children in Choshi city and we collected 396 questionnaires. Likewise, I asked the teacher to fill in the questionnaires. The collected questionnaire was input in a PC and statistical processing was performed. In addition, we also analyzed word occurrence frequency, co-occurrence network using free text mining tool.
As a result, it can be considered that learning support of Byobugaura for the 6th grade elementary school students at could have contributed to the fact that the students become more proud of their hometown.

Keywords: Choshi geopark, local lerning, science, Byobugaura Cliff, questionnaire survey

Regional Sustainable Economic Development through Geotourism

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1. Mt. Asama North Geopark Promotion Council, 2. Tokyo Metropolitan University

Mt. Asama North Geopark was certified as Japanese National Geopark in September 2016. Our Geopark’s theme is” Advance to the future with Mt. Asama”. People in the Asama area have a history of living with Mt. Asama. 38 geosites were selected at the Mt. Asama north geopark, and also a geostory of relationship between volcanoes and people's lives has been built there.

Mt. Asama Geopark Promotion Council has held many monitoring tours from the planning stage. In 2014, geo tour events that also served as guide training were held three times, and around 30 people attended each time. The main geosite of the Mt. Asama North geopark "Kambara Village” and Special National treasure “Mt. Asama volcanic lava tree”, and the base facilities "Onioshidashi-park” and “Asama Garden" became the target place in the tour. In addition, we conducted a tour of mountain climbing Mt. Asama. In 2015 we conducted geotours five times. We organized a tour to get familiar with the geopark concept with parents and children, and a tour to explore cultural properties and regional resources of Naganohara Town. We have also conducted monitoring tours in 2016 as well. On the other hand, we have also implemented distinctive approaches like “Geo Yoga” events that do yoga at geosites.

We aimed to develop a sustainable regional economy and have been developing geotourism projects, but there are still issues. From now on, we will periodically carry out various geotours throughout the year and strengthen our public relations activities. Furthermore, it is necessary to make model courses based on themes and stories, and publish them on guide books and websites.

Regarding the training of guides, the guide their self deepens knowledge through activities such as making guide texts. In the future, we will consider structured guide training courses and nurture high-quality geo-guides. At the same time, in order to achieve sustainable economic development through geotourism, it is also necessary to introduce geotour participants to promote consumption within the region. We will try to improve the geopark brand, and we will further promote the development of ” geo gourmets “ and geopark related products.

Keywords: Geopark, Geotourism, Regional development, Mt. Asama

Finished Geopark Japan Geo park Kanto meeting in Shimonita ; and to the next step

*Hara Hideo[1], Hideo Suzuki[1], Tomohiko Sekiya [1], Miyuki Katayama[1]

1. geopark shimonita counsil

Intro

It is located in Southwest Gunma, and Shimonita town having special products such as the konjac and *Shimonita-negi* is the farming and mountain village that is full of nature. Shimonita town was registered with the Japanese Geopark in 2011, and one Arafune cold storage of the geosite became the world heritage again in 2013. And now, we develop citizen-based town planning which have world heritage and geopark.

In the Geopark Shimonita council, we reviewed the Geopark promotion system pointed out by reexamination of 2015 and installed and academic sectional meeting, a guide sectional meeting, an education sectional meeting, an industrial tourism sectional meeting in the meeting inside. "Japan Geopark Kanto meeting in Shimonita " held preparations while adopting the opinion of each sectional meeting in 2016. In this report, we report the summary of the Kanto meeting that we held with a new system and the present conditions of the Geopark after the meeting.

Japan Geopark Kanto meeting in Shimonita

We held "Japan Geopark Kanto meeting in Shimonita" with *Shimonita-negi* Festival 2016 at the same time on November 20 and 21. Approximately 150 people who play an active part each in each Geopark gathered for this meeting. We set two of the Geopark PR to *Shimonita-negi* Festival participant and the cooperation reinforcement of the Geopark around Kanto area in a concept.

Furthermore, we titled " Let's offer local treasure˜ the Geopark that bring up the future of children". We offer the educational activity of the Shimonita Geopark to the outside in the whole meeting; programed it. At the lecture, we heard the lecture that he invited the organization "Shimonita nature research center" where was specialized in science education to Shimonita in an education policy of Gunma and developed an educational activity entitled "origin of the Shimonita Geopark" by Mr. Satomi(Japan geopark shimonita supporting party). We heard a lecture about "the Shimonita learning, native district learning program to have children know the good point with the geopark, " by Mr. Kanbe who was made a teacher in Shimonita junior high school.

And then, we held three subcommittees after a lecture. In the education subcommittee, we performed the discussion that focused on school education and social education. In the guide subcommittee, We held "the trouble discussion of the guide" to be settled through group discussion about being usually troubled with guide activity. In the story subcommittee, we held the workshop which shared the story of the Geopark of the neighborhood through Geopark tour course making. People of the specialized sectional meeting planned these subcommittees and ran it.

The geo-tour of the second day parted in three courses that walk through city space, visit Mt Myogi ,and visit world heritage Garifuna cold storage, and performed it. In course that walk through city space, we classified the class visit of the school into a tour trip and really observed the class scenery of the Shimonita learning.

Finished Japan Geopark Kanto meeting in Shimonita

We prepared for the plan of the program while hearing the opinion of the person of a meeting and the specialized sectional meeting. Furthermore, we had various groups in the town block cooperate on that day and were able to let a meeting succeed. We were able to strengthen the cooperation in the sectional meeting through Kanto meeting in Shimonita. And we will push forward Geopark activity in the whole area

still more in future.

Keywords: Geopark, Shimonita, education of science

Activity report of Geotour in Hakone Geopark

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1. Hakone Geopark Promotion Council

Hakone Geopark Promotion Council have worked on holding of monitor tours for the purpose of settlement of geotourism and the needs research of the geotour.
We report consideration for the tour fixation to this region from a result of the questionary surveys of the monitor tours.

Keywords: Hakone Geopark, Geotour

Thinking about 11 geo tours in Japan Geoparks National Council inIzu Peninsula Geopark

*Takehiro Sagisaka[1]

1. Izu Peninsula Geopark Promotion Council

Thinking about 11 geo tours on JGN national conference in Izu Peninsula Geopark.

Keywords: Geotourism, geopark

Rogaining and Geopark-think from the experience of Izu Peninsula Geopark Rogaining Game-

*Takehiro Sagisaka[1]

1. Izu Peninsula Geopark Promotion Council

Izu Peninsula Geopark became a member of Japan Geoparks Network in 2012. Since that time, we have held many kinds of events and meetings besed on geoscience. Izu Peninsula Geopark Rogaining Game is one of successful cases in these events.
I will introduce this event and try to think about relationship between geopark and rogaining-future topics and developments.

Keywords: geopark, sports, rogaining

Feel and Mind the Earth on the active volcanic island - Collaboratively Developing Field Laboratory and Excursion Programs as Education Tours for School, University and Public at Izu Oshima Geopark

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Young volcanic islands provide us great opportunities to experience, feel, learn and mind our planet earth and evolving life on it. As Izu Oshima is locating very close to the Tokyo metropolitan area, so many schools, college and university have been carrying out field laboratory and excursion programs to learn biology, ecology, earth and environmental sciences. Using these rich education programs and experiences, we together plan to reorganize these resources to develop open public education tours for sustainable use and conservation of national park by fulfilling aims and purposes of Izu Oshima Geopark.

Keywords: Geopark, school excursion programs, education tours, outdoor education, biology, ecology, earth and environmental sciences

Making of a Comicbook and Renewal of the Website of Minami Alps Geopark

*Riyeko Fujii[1], Takahiro Kitahara[1], Ryuta Kobayashi[1]

1. Minami Alps (MTL Area) Geopark Conference

On the Minami Alps Geopark website, an easy 4-frame comic strip on earth science or the geosites has been posted about once a week since January, 2016. As the comic strips became popular, we made a booklet printed with 26 comic strips, chosen from the 50 posted in 2016, and the further information and maps together. We plan to give the booklets to the school children in the geopark area and participants in geopark events.
The Minami Alps Geopark website, opened in 2011 and modified in 2014, was totally renewed in March, 2017. Improved points are: better maps for model journeys, linking with social networking sites, opening of the smartphone site, changes to appealing pictures and layouts, and so on. The new website is expected to attract outdoor people with less interest in geoparks.

Keywords: Geopark, Minami Alps, Median Tectonic Line

Hakusan Tedorigawa Geopark Promotional Activities

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1. Hakusan Tedorigawa Geopark Promotion Council

Since before its certification as a Japanese Geopark on the 10th October 2010, the Hakusan Tedorigawa Geopark has been promoted through many public awareness activities.
In addition to continuous promotional activities held before its certification, such as workshops, lectures, booths and panel exhibitions at various events, articles were published in the Hakusan PR Brochure between 2011 and 2014, after its certification. Furthermore, in 2012 the Hakusan Tedorigawa Geopark mascots Yuki Mama & Shizuku-chan performed at many events, and a program promoting the Hakusan Tedorigawa Geopark began airing on Hakusan City's cable television. Through these means, present promotional activities are being spread far and wide.
Since 2012, we have conducted a survey at an annual snowman festival held in late January or early February, in order to measure how effective the promotional activities have been. The survey is a very simple multiple choice form in which visitors answer "I know the Geopark very well", "I know it a little", "I only know the word", and "I don't know at all".
The results showed that there have been no big changes or trends between each year. However, the amount of citizens who answered "I don't know at all" is a mere 10%; very small when compared to other groups. Therefore, we believe that our promotional activities aimed at the residents of Hakusan City are showing progress.
An upcoming issue is that the surveys have not been counted using a unified method, so it is necessary that we re-think our process. Another issue we face is that as promotional activities such as events, television broadcasts, and PR publications are mostly directed towards the city, promotion outside of the prefecture is weak, with no effective solution.

Keywords: Hakusan Tetoragawa Geopark, public awareness, investigate for degree of recognition

Report on *Hakusanroku Project* at the School of Policy Studies, Kwansei Gakuin University -To support the policy role of Hakusan Tedorigawa Geopark-

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The Geopark radical purpose is a local authorization program to push forward sustainable development, which is promotion such as the maintenance of the geological feature inheritance, education or the sightseeing. In the Hakusan Tedorigawa Geopark, It is said to be the symbol of the merger of 1-city 2-town 5-village and takes role of the policy, which is by appointing the whole Hakusan City in the Geopark. Our the *Hakusanroku project* team held a workshop that invited a primary schoolchild from the whole city on the geo-site of the foot of a mountain part in 2012 and 2013. In this workshop, we worked on the creation of the opportunity when primary schoolchildren harmonized across the boundary of the former local government. The primary schoolchild who participated observed the life actual situation of the heavy snowfall area in Shiramine district, and Tyugu pavilion which could learn nature of Mt.Hakusan. In addition, the primary schoolchild cooperated and manufactured a poster and the wall newspaper of the Geopark. On the other hand, this program have a problem that how we create a civic sense of unity of the wide generation. Then the team focused on “The journey of water bringing up the lives” which is the theme of Geopark. That means, the snowmelt of Mt.Hakusan goes to city plains from Tedori Canyon, and after it goes to Sea of Japan. Then the water comes back to Mt.Hakusan as snow again. This cycle is considered as a key point to foster citizen’s sense of unity because this cycle, “the journey of water”, supports all citizens. In 2014, the team suggested that low head hydro power using domestic water as a revitalization of the foot of mountain. In 2015, they incubate the event of environmental education for children in elementary school which supply an opportunity to learn how to make a generator using a plastic bottle and waste wood. After make it up, they held light-up event with the generators and showed citizens in Hakusan City receive benefit from “The journey of water bringing up the lives”. This event could get more than 300 attendance. In 2016, the person in charge of Hakusan City‘s sightseeing culture Geopark promotion room, the representative inhabitant who lives in the event site, and students of *Hakusanroku project* team gathered and talked about project of the previous year, and project plan of 2017. In this year, *we are* going to restore the waterwheel which was stopped using by 20 years and enlighten the favor of “the journey of the water” through power generation by using the water mill. This poster will publish mainly about the possibility of supporting the political role of Geopark by students belong to faculty of policy management through report of the *Hakusanroku project*.

Keywords: Hakusan Tedorigawa Geopark, School of Policy Studies, fieldwork

The Challenges and Prospects of Study Tour in Dinosaur Valley Fukui Katsuyama Geopark

*Sumiaki Machi[1]

1. Dinosaur Valley Fukui Katsuyama Geopark Promotion Committee

We have officially accepted 3 parties of tour (kind of study tour) in 2016: from Biei, Hokkaido; from Obihiro, Hokkaido; and Okazaki, Aichi.

The party from Biei was members of study tour to visit outside Hokkaido. They carry out this tour every year. The participants are elementary school students in Biei. Biei is the area of the aspiring Tokachidake Geopark. They decide to visit us during the tour to see and learn other geopark(s).

The visitors from Tokachi were members of Tokachi Study Group of Natural History. They cally out an excursion every year and this year they visited geoparks in Hokuriku region (Tateyama Kurobe Geopark, Hakusan Tedorigawa Geopark and Dinosaur Valley Fukui Katsuyama Geopark).

The visitors from Okazaki were a group of science teachers. Some of them are geoscience teachers. They carry out such a study tour every year.

We report the challenges and prospects through the experience to accept those tours.

Keywords: Dinosaur Valley Fukui Katsuyama Geopark, Study Tour, Challenges and Prospects

Tour Promotion of San'in Kaigan UNESCO Global Geopark by rental car

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1. San'in Kaigan UNESCO Global Geopark

We,San'in Kaigan Geopark Promotion Council,cooperated with Rakuten Travel and carried out [Tour Promotion of San'in Kaigan UNESCO Global Geopark by rental car] .
I am going to introduce contents of this prpmotion and effect.

Keywords: rental car, San'in Kaigan UNESCO Global Geopark, sightseeing

The development of original goods chosen by tourists ~The effort of “Kumano Waroda” on Nanki Kumano Geopark~

*KYOKO FUKUTSUJI[1,2], Yasuyo Nishiura[1,2]

1. Nanki Kumno Geoparkguide, 2. kumano Waroda

Two years have pasted since "Nanki Kumano Geopark" in Wakayama was certified as a Japanese geopark. In this area, various organizations are engaged in activities related to geo, for example geo tours etc. have got stable popularity and participants are gradually increasing.
However, in the local souvenir shops and hotels, you can not see any goods related to the geopark, and even if tourists visit the Nanki Kumano Geopark, they can not buy any memorable souvenirs.

The "Kumano Waroda" to which we belong consists of members of various professions such as sightseeing guides and tourist officials, self-employed persons, company employees, company officials, local assembly members, local government officials. Until now, we have held lectures in which we use the activity promotion project of the **Nanki Kumano Geopark Promotion Council .** We have made geo-story shows and collaborated the Ramsar site with our geoparks, but in 2016 We decided to develop Geo Goods which would appeal to tourists.
As the design of the goods is important, we decided to ask the designer without designing by ourselves. We decided to appoint a local designer so that money would circulate within our local area and asked the designer who has taken a geo guide training course at Nanki Kumano Geopark so it would be easy to convey the image of the geopark.
Designers proposed six Geopark-like designs.

We decided on the design and price range by popularity vote. We decided to use popularity voting based on Facebook and the Japan Geopark National Convention held in Izu Peninsula in October 2016. As the results of the questionnaire were the same as in both Facebook and the national convention, we decided to make prototypes based on two popular design ideas out of six.

We decided on what to make from the popular price range. Members gave out various ideas such as T-shirts, tote bags, towels, Japanese towels, mugs, block-type memo pads, clear files, masking tapes, etc. However, If we had chosen T-shirts, we would have made them in various sizes. So we gave up making T-shirts. Because we were afraid that we might have inventory. Ultimately, we decided to produce three prototypes ; tote bags, mugs, clear files, with two kinds of designs. Then, we compared the designs of prototypes delivered from designers and we decided to adopt a design in which famous geosites, also known for tourists, are arranged flat.
And, finally on the first sale at "the 4th Nanki Kumano Geopark Festa "held on February 14, 2017, we sold 4 tote bags(\1200), 11 mugs(\1000), 19 clear files(\ 200).

Although it is difficult to design concepts that are not familiar to the general public, this time, designs that can convey the attraction of geoparks have been completed because the students of the geo guide training course were appointed as designers. We felt it was important to share the same feelings and ideas with us. By conducting questionnaire survey nationwide, we knew for designers not only our own regional love, but also the designs that everyone sought. So we were able to produce goods with confidence However, sales at GeoparkFesta were not so good, because I think that it was partly due to lack of

advance PR, so it may have been better for us to ask local newspaper companies to take up the development process.

We will also consider the sales channels of original goods so that the regional economy will circulate and pick up.
This time, we were happy that the designer joined and she would make “the Kumano Waroda” stronger which led to further power up of the group.
From now on, I would like to work on community activities in order to make the regional resources of the Nanki Kumano Geopark more attractive, and to boost the local community.

Keywords: original goods , popularity voting , the regional economy will circulate and pick up.

The first step to establish the Geotourism brand; report of the 9th Japanese Geoparks Network workshop in Mine-Akiyoshidai Karst Plateau Geopark

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1. Mine-Akiyoshidai Karst Plateau Geopark Promotion Council, 2. Tokuyama University

We held the 9th Japanese Geoparks Network (JGN) workshop on Geotourism brand in Mine-Akiyoshidai Karst Plateau Geopark from March 10 to 12, 2017. About 100 geopark office and travel staffs participated in the workshop. The purpose of this workshop was to establish the Geotourism brand. Each Geopark attempts to make unique tour in each area. To satisfy the visitor with season-free geotour was the subject of this workshop. We continue improvement and considerations of the geotour for next JGN National Conference in Oga Peninsula-Ogata Geopark from October 25 to 27, 2017. In this poster, we introduce the results of the workshop and some voices of the participants.

Keywords: Mine-Akiyoshidai Karst Plateau Geopark, the 9th Japanese Geoparks Network workshop, geotourism

Efforts towards revitalizing the Shikoku Seiyo Geopark Promotion Council

*Fumito Doi[1], Tsukasa Takahashi[1], Motoki Yamashita[1], Yuuya Kato[1], Chisato Nakamura[1]

1. Shikoku Seiyo Geopark Promotion Council

With an elevation extending from 0 to 1400m above sea level, Seiyo City has significant geological features and terrains. Along with a rich history, culture and ecosystem, these provide various local resources that form the geopark.

Within the city, the idea “geopark” highlights the charm of the environment and its natural resources. The city government, related organizations, and local groups apply this idea by creating activities that reinvigorate pride and love for the region in addition to bolstering community ties.

In July 2012, the Shikoku Seiyo Geopark Promotion Council was formed from 50 various groups, organizations and businesses. Because the initial purpose was to promote and build awareness about geoparks, planning and execution was largely done by the executive office after receiving approval from the council. As a result, local residents were not at the core of this organization.

Four years on, the public’s awareness of geoparks had improved, leading the Council to realize the importance of the public’s involvement. This resulted in a reassessment of the organization’s structure.

As part of these considerations, four sub-committees have been established: Conservation, Education, Tourism, and Goods. Five to eight ambitious and energetic members were elected from the participating groups to create committees that can move to action easily.

This poster details the current activities and tasks of the sub-committees, as well as the future prospects of the organization.

Keywords: Council, Geopark, public’s involvement

Activities of Tosashimizu Geopark Guide Training Cource

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1. Tosashimizu Geopark promotion council

The first "Tosashimizu Geopark Guide Training Course" was held from July to October in 2016.
Sixteen residents who take all lectures in the course certified as a geo-guide.
Tosashimizu geopark promotion council continues supports includes lectures about geoscience and field study in all the geo-sites for the geo-guides after the certification.
The council will support them in multiple ways.

Redefinition of “geosites” in Unzen Volcanic Area UNESCO Global Geopark

*Marekazu Ohno[1]

1. Unzen Volcanic Area Geopark Promotion Office

The Council of Unzen Volcanic Area Geopark defined 189 Geosites in the territory in 2008. However these “geosites” had been constructed by mixture of geological, ecological, historical / cultural sites and included in elements which were irrelevant to define as geosites, e.g., art museums and so on. Furthermore, the sites which established after 2009 had not authorized as “geosites” in Unzen Geopark. Recently, GGN requires classification of these “sites” on the basis of these geological, ecological and historical / cultural values of them to geopark areas.

In order to cope with these requirements, the Council of Unzen Volcanic Area Geopark has redefined “sites” in the territory depending on their academic values. Specifically, we removed sites that had difficulty in linkage with the earth activity and sites that we could not observe now including backfilled remains from a list. And then we authorized new sites (historical / cultural sites along a new mountain trail etc.) and divided these sites into 4 categories on the basis of academic values; 1: 23 geological sites, 2: 9 ecological sites, 3: 57 historical / cultural sites and 4: 41 composite sites. Total numbers of sites and facilities are 130 and 16, respectively.

In enforcing the redefinition of sites, it is important that members concerned geopark activities argues and shares what kind of value each site has. If the values of each site share geopark members, they would make conservation and utilization plan of these sites easily. On the other hand, redefinition of sites has great influence on the production of materials and hardware. It is desirable to do a careful argument about the values of sites among geopark members.

Keywords: Geopark, Geosite, Unzen Volcanic Area UNESCO Global Geopark

Cooperation in multiple fields in geotour making: Kirishima geotour “journey of water"

*Toru Ishikawa[1]

1. Kirishima Geopark Council

It is one of the real pleasures of Geopark activities that people and organizations in various fields cooperate with each other based on earth science and acquire new awareness while learning from each other. The "journey of water" geotour in the summer of 2016 sponsored by Kirishima City Tourism Association became a place of such practice. This tour was to explore with participants how rich rainfall that falls on the Kirishima Volcano Group flows through the ground and underground to the lives of the people living at the foot, and in addition to the Kirishima geo guides, students of Kirishima High School served as guide and staff of the day. The tourism association for the planning and operation of the tour and the concept of the theme, the high school for students' guidance from an educational point of view, the Geopark secretariat for the local lecture to the students at the preparatory stage, deepening mutual communication and making tours. As a result of the event, not only received high evaluation from participants, each member involved in the tour had a sense of fulfillment and was able to recognize the value of collaboration. In addition, it is considered that high school students experiencing the position of tour organizers side autonomously will also lead to the fostering of leaders for sustainable regional development.

Keywords: geotourism, education, collaborative communication

The road of integration for geoparks

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1. The Council for the Promotion of the Kirishima Geopark, 2. The Council for the Promotion of the Sakurajima-kinkowan Geopark

2016 Integrates two geoparks adjacent to Kirishima geopark, Sakurajim-kinkowan geopark as world geoparks approved the recommendation for the differentiation and its proximity and other volcanic geopark, and international cooperation as well as the main reason recommendation has been postponed, the world was required.
That's where both geopark in extraction of the study area extensions and new geosat, global challenges, such as that.
Unprecedented integration of multiple geo Park initiative, is in the middle of the road activities to disseminate information, want the opinions of participants.

Keywords: geopark, GGN, intgration

Introduction of “Crossroad Game (Sakurajima’s Volcanic Disaster Prevention)”, a Disaster Prevention Themed Game.

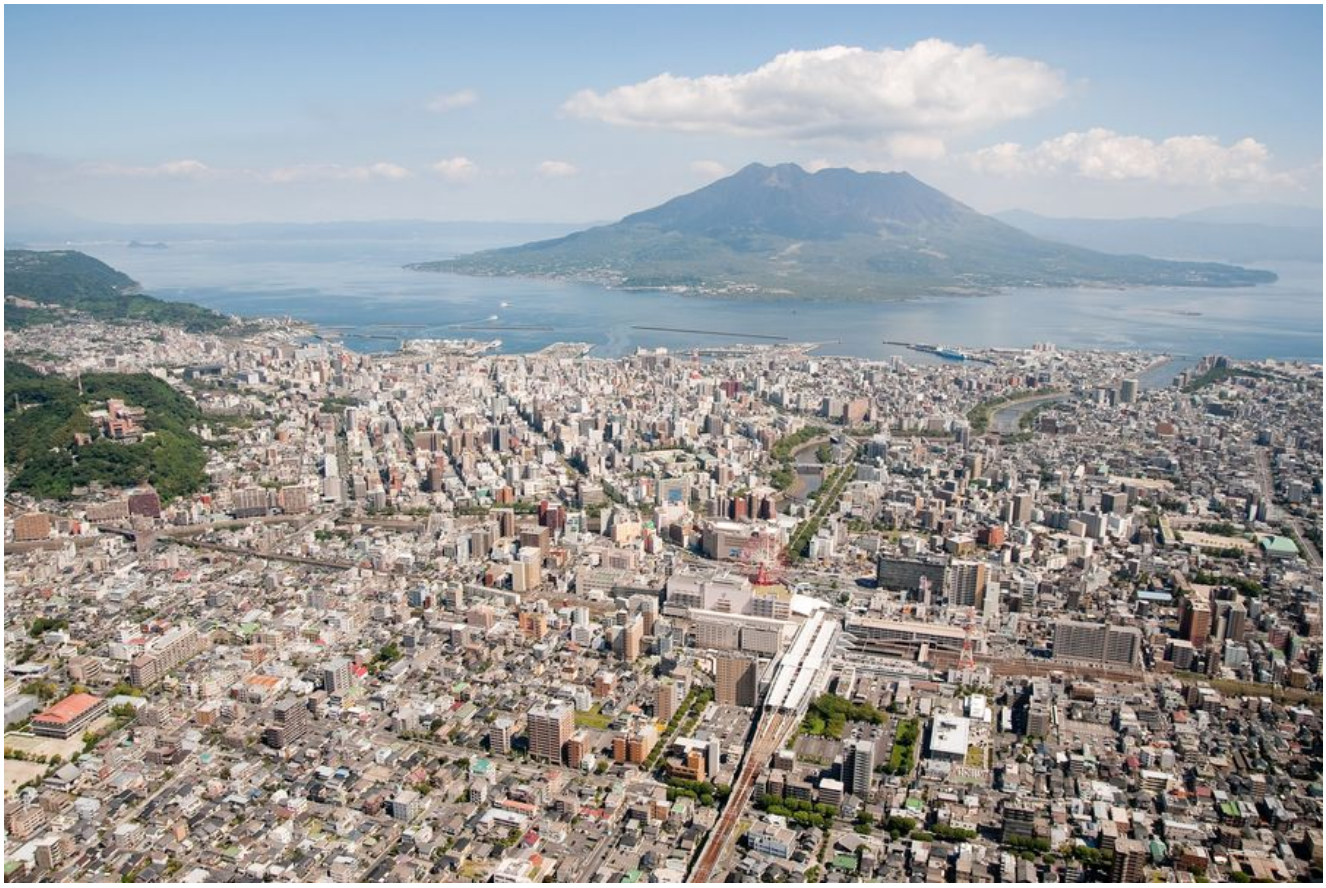
*Furutono Noriaki[1]

1. Sakurajima-Kinkowan-Gopark Promotion Council

Sakurajima-Kinkowan Geopark is a place of active volcanic region where huge eruptions kept erupting since about a million years ago. There are immense nature such as an active volcano Sakurajima which continue its eruption activities, and a deep and bountiful ocean made by volcanic activities called Kinko Bay.
There is also urban areas of more than 600 thousand people within 4 km away from actively erupting Sakurajima which allows world’s rare coexistence of an active volcano and urban city.
The geopark makes “relations of volcano with human and nature” as the main theme since the volcanic activities largely affect and are related to landscape, nature, people’s lives and culture.
There are four huge eruptions: Tenpyo Hoji Eruption (764 to 766), Bunmei Eruption (1471 to 1476), Annei Eruption (1779 to 1782), Taisho Eruption (1914 to 1915) occurred in Sakurajima since recorded history and people lived together with volcano by overcoming volcanic disasters up until today
It is said that about 90% of magma erupted by Taisho Eruption in about 100 years ago have restored into Aira Caldera’s underground magma chamber and huge eruption comparable to Taisho Eruption will happen in the future.
Furthermore, since there was an earthquake with an intensity of lower 6 at urban areas of Kagoshima city in about eight hours later from Taisho Eruption had occurred, earthquake preparedness is also necessary.
Hence, the disaster prevention game educating residents about the knowledge of volcanic disasters and disaster preventions and fostering the skills of consider about disasters and act by themselves has developed by Sakurajima-Kinkowan Geopark. The game is called “Crossroads game” which enable a wide range of residents to participate, think and learn with pleasure.
“Crossroads game” is an educational tool of card format about disaster prevention which was based on interviews with governmental officers of Kobe City who handled disasters during The Great Hanshin earthquake.
The game played by a group consist of one facilitator and five or seven players. It also can be one facilitator and several groups.
A facilitator presents “roles of players”, “challenges people face during disasters”, and “two kinds of actions under the challenges.” Players decide an action by choosing either of YES or No card and put it face down on the field/table. Players then turn over own card at a sign given by the facilitator. Player(s) in the minority group receive prize. (Minority in this case - one out of five players or less two out of seven players).
The reason why the minority win a prize is that this cross road game is based on the idea of sharing the importance of paying attention to minor things or changes that many people might not notice when disaster occurs.
Questions for the game was firstly created by disaster management departments in Kagoshima City government, taking account of the city’s local disaster planning and the actual measures that implemented at the rise of Sakurajima’s eruption alert level to 4 in 2015. Then further discussions with community development promotion groups took place to finalise the questions.
The game was launched at a Geopark public lecture on March 16th this year. It will be carried out more at other public lectures and disaster drills.
The aim of this Crossroad game program is to offer the local residents opportunity to learn Geo-hazards in

their area and necessary preparations for possible disaster.

Keywords: geopark, sakurajima, Volcanic disaster prevention, Disaster prevention game



Utilization of Oita Himeshima Geopark Center

Toshikatsu Chujo[1], *Yu Horiuchi[1]

1. Oita Himeshima Geopark Promotion Office

New facility of Oita Himeshima Geopark Center is built in 2017. This facility is a single-story wooden building with total floor area of 247.38 m^2 and a site area of 1252.90 m^2. There are an exhibition room of 115.52 m^2, a storage room of 28.88 m^2, a work room with meeting space, an office room and toilets. The walls of storage room consist of moisture conditioning boards, so it is possible to store and manage valuable materials and ancient documents. Whereas Rito center "Yahazu" which is training and welfare facility also attaches a local material exhibition room of Himeshima village, it has not been fully utilized as a base of Geopark activity. At the new facility, resident staff provides explanation of exhibits, such as introduction of geoparks, exhibition of fossils and minerals which are difficult to observe in the field, and achievements of regional learning by children. In future, improvement in exhibition and trainings for staffs and guides are necessary to provide sufficient explanation in this facility.

Keywords: museum, center for geopark activity, visitor center, Amanohitotsune

Educational practice case and it's characteristic in Geopark

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1. Okayama University

In recent years, developing understanding and attachment for a region through regional learning in the elementary school are demanded. There are two kinds in the regional study. They are “learn in region’’ and “learn a region’’. “learn in a region’’ develop general capacity. On the other hand, “learn a region’’ develop the understanding and attachment for a region. But it has an assignment. It is to extract resources from a region, because the content in elementary school class is different.
A variety of experts extract many resources in the “Geo Park’’. Also, they are utilized in educative action. So, educative action in “Geo Park’’ give us suggest.
Then in this study I get educative data from “Geo Park Office’’. And I analyzed them.
This study discloses that “learn in region’’ and “learn a region’’ have something to do each other.

Keywords: Geopark, Regional study

