



Toya Caldera and Usu Volcano Global Geopark Progress Report 2009-2013



**Toya Caldera and Usu Volcano
Global Geopark Council**



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1 Basic concept of Toya Caldera and Usu Volcano Global Geopark

1-1 Repeated volcanic disasters and blessings from the volcano

The Toya Caldera and Usu Volcano Global Geopark is a volcanic Geopark containing both the Toya Caldera, which was created by catastrophic pyroclastic eruptions at 110,000 years ago, and the world-famous Usu volcano which has been active since 20,000 years ago. Because Japanese Islands is located in quite active tectonic belt among the earth, many of Geoparks in Japan feature geological hazards such as earthquakes and volcanic eruptions as main theme. Especially, Toya Caldera and Usu Volcano Global Geopark is the most representative of these, having experienced at least nine eruptions in the past 350 years.

This area constantly faces the risk of volcanic eruptions. Mt. Usu resumed volcanic activities again in 1663, and has erupted repeatedly at least nine times until now. New lava domes and cryptodomes have been formed at each eruption, and the surrounding area has been damaged by topographic changes by ground deformations and ash falls. Ainu village was burned, claiming many victims by pyroclastic flows at 1822 eruption. In 1943-1945 eruptions, Showa-shinzan lava dome was formed at the foot of Usu volcano, which induced to abandon the villages at the site. Volcanic mud flows accompanied with 1977-78 eruptions also claimed some casualties. On the other hands, although the 2000 eruption which occurred at the foot on the volcano caused a lot of property damage to the people living at the foot of the mountain, including the national roads, apartments, and houses collapsed by crustal movement, no lives were lost because of accumulated disaster prevention experience and volcanological research and endeavors of the local residents.



Usu Volcano 2000 eruption

The complex coastal topography formed by the sector collapse of Usu volcano 7000 years ago from Usu volcano has brought up plentiful marine ecosystems. Jomon and Ainu peoples built their cultures while living together with the diverse nature that has been formed by the volcanos. In addition, the hot springs and beautiful landscapes created by the 1910 eruption attracts many visitors to the area today.

1-2 A culture of disaster prevention created by researchers, municipality and local residents

It is quite rare that people live very close to active volcano as this area. By many researchers, administrators, and the local residents close risk communications have been carried out, and create a culture of disaster prevention for over one hundred years.

At 1910 eruption, when modern volcanology was still very young, researchers observed precursor volcanic earthquakes and reported them as signs of an upcoming eruption to the local police, who lead in evacuation more than 15,000 people five days prior to the first eruption. After that, researchers made lectures for the local residents to allow them the sharing of scientific information about eruption predictions, disaster prevention, and risk communication between



Pioneers who established a culture of disaster prevention of this region (researchers, municipality and local residents)

researchers, administrators, and the local inhabitants. This approach, in that took place for the first time in the world, is a remarkable achievement prior to all over the world. In 1944 eruptions, despite the occurrence in World War II, many researchers investigated Showa-shinzan. The formation process of Showa-shinzan, which was recorded by the local postmaster who had learnt the basics of volcanology from researchers during 1910 eruption, was presented as "Mimatsu Diagrams". This achievement was received high praise at the international scientific conference.

As economic development became the first priority after the war, this area became a tourist attraction with many people visiting every year, and words like "eruption", "disaster", and "disaster prevention" were suppressed by the local inhabitants. Thus, important scientific data such as precursor volcanic earthquakes and warning by scientists and disaster officials were neglected at 1977 eruption, and the local residents found suddenly looking up at a 12 km high eruption column in their daily lives. This experience made residents aware of the new consciousness of disaster prevention. To prepare for the next eruption, hazard maps of Usu volcano were distributed to every household, international volcanological workshops were invited, and more thorough risk communication with researchers, local administrators and residents have been developed.

At the next eruption occurred in 2000, fast voluntary evacuation of residents from dangerous areas have done until the day before the eruption, on the basis of the scientific research results, disaster prevention action of municipality and disaster prevention experience, which stored since 1910 eruption.



International Workshop on Volcanoes
Commemorating The 50th Anniversary of Mt. Showa-shinzan

1-3 From Eco-museum to Geopark



After the 2000 eruption, the local residents appealed that volcanoes blessings (hot springs, fertile earth and beautiful landscapes) and well-developed disaster safety measures could become new resources for tourism which match this area. The local residents choose to co-exist with the ever changing earth and began to aim sustainable development. The residents and municipality started to promote the "Lake Toya Area Ecomuseum", like an open-air museum where maintained footpath with eruption disaster ruins conserved as their heritage. Through the activity, they know the "Geopark" project. This concept was developed together with the hopes of the local people. And through the GGN certification, the developmental transition of an Eco-museum to Global Geopark have done to go towards the larger goal.

1-4 The Toya Caldera and Usu Volcano Global Geopark - Creation of a disaster prevention culture

The defining characteristic of the Toya Caldera and Usu Volcano Global Geopark is the creation of a strong awareness of the culture of disaster prevention by educating the local residents such as the Toya-Usu Volcano Meister system, and by conserving the records and memories of previous disasters.



In addition to the fundamental aim of Geopark, the “conservation of geosites” and “sustainable development of the area, we aim to foster not only local residents but also visitors from the world through disaster prevention education to sustainable development of the world. We strongly hope to share our awareness of "co-existing with the volcano" for several generations with the world people by geo-tourism.

In order to further these ideas and actions, we have set up the Toya Caldera and Usu Volcano Geopark Master plan. This plan consists of establishment of self-governing management organization beyond the boundary of municipality, geosite conservation, continuous development of geo-tourism and scientific research, transmission of Geopark information, human resource development such as residents that is conscious about geoscience and disaster prevention (ex. Volcano Meister). We are continuing to develop the Geopark based on these ideas.

【Proposal】 A culture of disaster prevention as an international standard

We have always geo-hazard risks on the earth. It is impossible to eliminate the geo-hazard risks completely, although we have a culture of disaster prevention for the people living in this area.

Due to the topographic and geologic characteristics of the area, styles and scale of disasters could be changed variously. Because of this, every person has to scientifically understand the characteristics of the area and understand how to react as a society in the long term if something happens. Development of disaster prevention culture and residents education, such as our Toya-Usu Volcano Meister system, could make valuable contributions to the co-existence of humans and nature on this rich yet dangerous planet.

We recognize the responsibility for development of disaster prevention culture and transmission of our experience.

We think that the “Geopark” plays an important role as a project to share the consciousness for coexistence with human, all life and earth, which does not stop with just preservation of geo-diversity and sustainable development of local community.

Geoparks project have been spread fast in Asia, America, Africa, where high-risk disaster areas. It is essential that we also be conscious about continuing disaster prevention education in each area and training of personnel responsible for it.

We propose that the disaster prevention educational activities and related human resource development should be positioned as an important evaluation sufficiently in GGN self-evaluation form, so that all candidate areas and Geoparks across the globe can become aware of these matters.



1-5 Formulation and Promotion of the Toya Caldera and Usu Volcano Global Geopark Master Plan

At our Geopark, which possesses these characteristics and beliefs, we aim to continuously develop a plentiful, safe area, after much continuous discussion about the core fundamental strategies for the promotion of the Geopark, the "Toya Caldera and Usu Volcano Global Geopark Master Plan" was drawn up in March of 2012. (See illustration below). This plan was based off of the GGN guidelines and comprehensive programs of all municipalities, culminating in (1) an Operation Plan, (2) a Promotion Plan, and (3) an Implementation Plan. The operation plan shows an effort towards sustainable long-term Geopark operations. The promotion plan offers concrete ideas for research within the park, conservation, management, education, publicity, tourism, localization of park materials into other languages, transmission of information, regional outreach, and the development of security and disaster reduction systems.

1-6 The basic concept of Promotion for Toya Caldera and Usu Volcano Global Geopark

The general promotion strategies laid out by the master plan are as written below, focused primarily on the basic principles and policies. The following seven items are the points of focus for the promotion project, aiming to create sustainable development in the region.

"Toya Caldera and Usu Volcano Global Geopark Master Plan" Contents

Chapter 1 : Goal of promoting the Toya Caldera and Usu Global Volcano Geopark

- 1-1. Fundamental principles of the Global Geoparks Network
- 1-2. Goal of promoting the Toya Caldera and Usu Volcano Global Geopark
- 1-3. Overview of the Toya Caldera and Usu Volcano Global Geopark area

Chapter 2 : Positioning and objective of formulating Master plans

- 2-1. Objective of the formulation
- 2-2. Planning period
- 2-3. Positioning

Chapter 3 : Administrative planning

- 3-1. Administration through participation in the planning of each subject
- 3-2. Administrative organization
- 3-3. Administrative budget

Chapter 4 : Geopark promotion plan aimed at sustainable development

- 4-1. Research activities
- 4-2. Conservation and management of Geopark area and geosites etc.
- 4-3. Education and dissemination
- 4-4. Tourism
- 4-5. Information dissemination
- 4-6. Regional coordination
- 4-7. Improving disaster prevention and ensuring safety in an active volcano area

Chapter 5 : Plan implementation

- 5-1. Plan implementation
- 5-2. Promotion indicators

Fundamental Principles of the Geopark

Utilizing

Research and
conservation

Education and
dissemination

Geotourism

on the geo heritages that is a valuable legacy of the region, aiming for sustainable regional development.

= Goal of promoting the Toya Caldera and Usu Volcano Geopark

Administrative planning

1. Administration through participation in the planning of all subjects

[Subject]

Residents living in the region

[Administrative Organization]

Promotion Council (Resident activity support, GGN etc. and coordinated contact with support organizations)

2. Coordinating and improving administrative organization

Participating in planning of various regional matters. Establishing academic advisory meetings, coordinator meetings, 5 expert committees, in accordance to their role.

3. Creating mechanisms to ensure administrative budgets

Contributions from organized cities and towns.
Subsidiary aid from government bodies.
Creating mechanisms to acquire independent sustainable revenue

Geopark promotion plans aiming for sustainable development

1. Promoting research activities

2. Maintenance and management of the area/geosites

3. Promoting education and promotional activities

4. Stimulation of geotourism

5. Providing information and intensifying transmissions

6. Improving regional coordination

7. Improving safety and disaster mitigation systems

Promoting with the following 5 points as a foundation

- * Based on a scientific evidence
- * Ability to be enjoyed by a broad range of people
- * Consideration of the natural environment and regional economy
- * Sustainability
- * Safety

This Geopark aims to engage in sustainable development of the region utilizing its vast and valuable land resources and heritage from the standpoint of "Research and Conservation," "Education and Publicity," and "Geotourism." To that end, there are various approaches (the aforementioned "seven items") that must be considered in the promotion of this Geopark. The fundamental objectives of this project are "joint operation by all involved parties," "strengthening and coordination of management," and "creation and maintenance of an operations budget." These objectives implement each of the seven items.

Furthermore, the activities described in Sections 2-7 of this report succeed in demonstrating and promoting the designated items from the master plan.

Sections of this Report (As per self-evaluation sheet B)	Items from the Master Plan
2. Management structure and Financial status (II Management structure and Financial status)	【Administrative planning】 1. Administration through participation in the planning of all subjects / 2. Coordinating and improving / administrative organization / 3. Creating mechanisms to ensure administrative budgets
3. Conservation (geoconservation) strategy (III Conservation (geoconservation) strategy)	【Promotion planning】 1. Promoting research activities / 2. Maintenance and management of the area/geosites / 7. Improving safety and disaster mitigation systems
4. Marketing and promotional activities after the official designation as a member of the Global Geopark Network (V Marketing and promotional activities after the official designation as a member of the Global Geopark Network)	【Promotion planning】 4. Stimulation of geotourism / 5. Providing information and intensifying transmissions
5 Sustainable economic development (VI Sustainable economic development)	【Administrative planning】 3. Creating mechanisms to ensure administrative budgets 【Promotion planning】 2. Maintenance and management of the area/geosites / 4. Stimulation of geotourism / 5. Providing information and intensifying transmissions
6 Strategic partnerships (IV Strategic partnerships)	【Administrative planning】 1. Administration through participation in the planning of all subjects / 2. Coordinating and improving administrative organization / 3. Creating mechanisms to ensure administrative budgets 【Promotion planning】 1. Promoting research activities / 3. Promoting education and promotional activities / 4. Stimulation of geotourism / 5. Providing information and intensifying transmissions
7 Contribution towards the work of the Network (I Contribution towards the work of the Network)	【Promotion planning】 1. Promoting research activities / 2. Maintenance and management of the area/geosites / 3. Promoting education and promotional activities / 4. Stimulation of geotourism / 5. Providing information and intensifying transmissions / 7. Improving safety and disaster mitigation systems

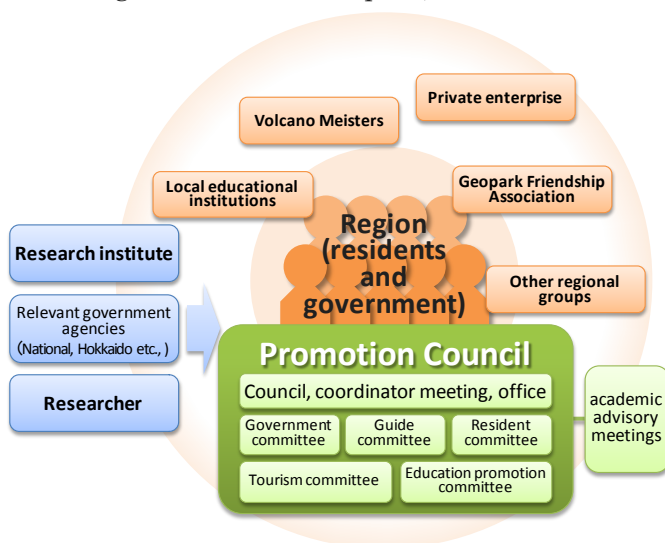
2 Management structure and Financial status

2-1 Establishment of Promotion Council (February 2010, after admission to GGN)

We established the Toya Caldera and Usu Volcano Global Geopark Promotion Council in February 2010, after being admitted to the GGN in August 2009. After the Usu Volcano erupted in this region in 2000, we developed the concept of a Toya Caldera Regional Eco-Museum as one reconstruction measure. It was designed to be an open-air museum presenting the region's rich geological features, natural environment, landscapes, industry, history, and culture. The museum was utilized for disaster prevention education, promotion of eco-tourism, and regional revitalization. After being admitted to GGN in 2009, we dissolved the Toya Caldera Regional Eco-Museum Promotion Council, and launched the Toya Caldera and Usu Volcano Global Geopark Promotion Council, in order to sustainably revitalize and develop this region as a Global Geopark, based around a diverse range of perspectives.



Toya Caldera and Usu Volcano Global Geopark General Meeting for the Establishment of the Promotion Council



The purpose of the Council is to support the regional residents, who form the core in promoting and utilizing the Geopark. As shown in the illustration left, diverse regional groups including residents' groups, unofficial tour guide groups, volunteer groups, regional tourism associations, educators, experts, and relevant government organizations are involved in our efforts. The Council was established as an executive office, working with the aim of promoting the Geopark by connecting these different organizations and organizing around their needs and strengths.

2-2 Financial Status

After being certified as a Global Geopark, our income, including contributions from our constituent municipalities and grants from Hokkaido, increased. We used this funding to continue initiatives such as spreading awareness of the Geopark and improving services available to users. (Refer to the attached self-evaluation form for information on annual income.)

In addition, the facilities of related businesses (tourist businesses such as hotels, ropeways, etc.) have continued to improve, including provision of information on the Geopark, and as a result, participants in the guided Geotours have increased. In addition to being registered as a Global Geopark, there is now greater demand for disaster preparedness education for schools, due to increased awareness about disaster preparedness following the 2011 Tohoku earthquake, which has led to increased use of the geosites and facilities in the Geopark. We expect that this will lead to continuous increased revenue for all related regional businesses, and we are working hard in this area.

3 Conservation (geoconservation) strategy

3-1 Geosite Conservation Policy

Geosite conservation is an important duty in the practical use of geosites and promotion of Geopark activities. The Geosite Conservation Policy was established in section 4, paragraph 2 of the Toya Caldera and Usu Volcano Global Geopark Master Plan. Following this policy, geosite conservation is centered on protection in accordance with national and local government regulations, and supplemented with conservation management and protection activities carried out as Geopark activities. Regulations relating to protection are listed below.

1. Natural Parks Law:	Prevention of damage to and the removal of plants and geological features in national parks.
2. Law Concerning State-owned Forests and Fields Administration and Management:	Conservation of the ecosystem and controlling development in state-owned forests and fields.
3. Law for the Protection of Cultural Properties:	Protection of tangible and intangible cultural properties, as well as natural monuments and protected species.
4. Hokkaido Prefecture nature and environment conservation ordinances, local government cultural property protection ordinances:	Development restrictions in the areas designated, such as those in Zenkoji, Kita Kogane, and Rebunge.

The main theme of this Geopark is "The Ever-changing Earth". Thus, for geosites that could be difficult to preserve by these laws, for example the sites which will change the appearance and landscape naturally by time elapsed, such as by vegetation recovery, by weakened or cease of fumarolic activity, this Geopark continuously monitors and preserves by two classifications and policy sited below.

- a. Those things which can be left to natural transitions as a part of the changing Earth and
- b. Those things which can be maintained with the smallest amount of intervention possible for the purposes of safety management, the prevention of destruction and damage from both the passage of time and human means, and to ensure visibility and aesthetic preservation.

3-2 Geosite Conservation Activities

Routine management, such as geosites patrolling, weed removal, and garbage removal, is carried out by local residents and area managers with their guiding activities on a regular basis. In case of large scale conservation activity must be carried out, or serious problems for conservation of geosites or visitors' safety occurred, the council will carry out conservation activities in cooperation with local government, related groups and residents groups, with support of scientific experts. Also, regional resources are protected by appointing new geosites. A geosite data book (see attached document) is produced and published in five languages, providing for an understanding of the value of the geosites and promotion of effective utilization. When carrying out protection and conservation activities, the council's academic staff participate in surveys and discussions, supervising with a scientific viewpoint.

■ Considerations for the Conservation of Geosites in Regional Development Activities

The following are examples of geosites and other major conservation activities that we have engaged in thus far.

Volcanic active faults crossing the Prefectural Route 2

There was an important geosite on prefectural Route 2 around lake Toya, where volcanic active faults activity related to eruptions in recent years offset the road, and could be observed in town areas still now. We designated there as geosite and put up explanatory signs for providing geotours. When the new plans had been proposed to straighten out the offset point by the fault, discussions between the Geopark council, the town office, and Hokkaido Prefecture led to a change in the plans such that observation of the phenomenon will be possible in the future.



Volcanic Active Faults along Hokkaido Prefectural Route 2

Response to Hot Spring Source Test Drilling Survey

In order to maintain the Toya Lake hot springs, a hot spring management association manages the source and carries out surveys of it on a regular basis. When the Geopark council was asked for advice because the area of the new test drilling survey encroached on a geosite, the council surveys of the area and discussed with them, and the plan was changed to conserve the geosite.



Conservation of Fault Scarp formed at 2000 eruption

■ Conservation and Restoration Carried Out Voluntarily by Local Citizens

This Geopark aim the establishment of framework to promote Geopark activities supported mainly by local residents, as laid out in the Geopark Master Plan (the chapter 3, section 1). Conservation activities have been carried out by local residents group (such as NPO Geopark Friendship Association, Toya-Usu Volcano Meister Network) and private organizations (such as local construction associations) with close cooperation with the council.

Weed Removal and Landscaping operation at Toya Lake Kindergarten

Local residents appealed that they should carry out conservative maintenance on their own so that the effects of the 2000 volcanic eruption on the Former Toya Kindergarten geosite (damage from ballistics, slopes created by upheavals, etc.) could be observed. Calls for participation were made to regional residents groups, with the Geopark council and academic advisory meetings members also taking a part in the planning, and in November of 2012 large scale weed removal and conservative landscaping operation were carried out in order to make the extent of the destruction from the disaster clear, with an area for observing vegetation recovery since the 2000 eruption left untouched. Weed removal and landscaping will continue on a regular basis in the future, carried out by the local residents with advice from the council and academics.



Former Lake Toya Kindergarten Garden Maintenance

Shinzannuma Outlook Park

Since 2010, the NPO Geopark Friendship Association carries out regular conservation activities on a preserved outcrop (Geosite Donkoro Mountain's Scoria Cone) where volcanic product from Usu Volcano can be viewed, two or three times per year. These activities include weed removal, restoration of the outcrop, and setting up information plates.



Volunteer work of weeding at the Conservation Outcrop by Geopark Friends Association

Yosomiyama Observation Tower

Usu Volcano's peak and Toya Lake used to be visible from the observation tower on Yosomi-yama, which was formed by an eruption in 1910. However, the tower has been lost to revegetation, so in May of 2013 the NPO Geopark Friendship Association conserved the area by pruning trees in accordance with all laws and regulations, and based on discussions about its conservation with the Ministry of the Environment's Forestry Agency and other relevant authorities.



Yosomi-yama Lookout Conservation Volunteers

Geosite Patrol

From 2013, the Toya-Usu Volcano Meister Network has implemented a "Geosite Patrol" for conservation. During the course of daily and guide activities, the patrol reviews site safety and conservation conditions, and cooperates with the council to make improvements.



Geosite Patrol

4 Marketing and promotional activities after the official designation as a member of the Global Geopark Network

4-1 Planned and organized maintenance

Stable management of Geopark and local sustainable development plans have been stipulated in the Basic Plan as per GGN certification. After discussions with local experts and guide group, the future plans and system were decided.

■ Toya Caldera and Usu Volcano Geopark Master Plan

We implement and carry out the “Master Plan” in which the basic concept of this Geopark promotion is stated, as mentioned at the beginning of this progress report.



■ The Implementation Plan of practical touristic attractions of the Geopark

The main way to revive tourism as main local industry is to take advantage of Geopark. In consultation with various agencies, including representatives from around Hokkaido, a "Geopark Destination Tourism Promotion Development Plan" was formulated at December 2010. This includes Geosite maintenance and access inside the Geopark, presentation and exhibition facilities, and guidance facility maintenance in order to increase tourist attractions. This was the established policy aimed at developing the Geopark as a tourist destination.

■ Other Organizations and Plans

Individual organizations handled the following services:

(1) Essentials of the Logo mark application (February 2010)

Official Logo mark applications and other procedures.

(2) Essentials of the graphic image application (September 2010)

Graphic image applications and other procedures.

(3) Essentials of the Geopark partner registration system (February 2012)

Created the regional activities improvement guide aimed at Geopark attractions and value promotion, as well as designing the network.

(4) Toya Caldera and Usu Volcano Geopark sign development plan (March 2010)

For the convenience of residents and to improve visitor access to the Geopark, road signs and guide signs were updated and maintained.

4-2 Promotion activities

Aiming to stimulate interest, dissemination and value improvement of Geopark, and intending to increase visitors, we are working to spread information about the Geopark via various means.

Japanese Geoparks Network conference 2011 in Toya-Usu Global Geopark

From September 28th to October 1st, 2011, the Japanese Geoparks Network conference 2011 in Toya-Usu Global Geopark was held. We conducted the programs such as poster session, Geo- Festival, forums, lectures, geotours and JGN certification ceremony together with children from each region. A total of 2,000 people took part. Main themes were: (1) Establishment of a sustainable community by Geopark activities, (2) Developing a society with disaster prevention awareness and environmental consciousness, (3) Handing down of Ancestral lessons, and (4) Adoption of "Toya Usu Geopark Declaration" (see attached document) aiming to Expansion of Geopark development through inter-regional cooperation. Participation from a great number of local residents and Geopark officials, from home and abroad, contributed to the regional revitalization of Geopark attractions.



Japanese Geoparks Network conference 2011



Geopark popularization activities at the regional events

PR events are listed below. This includes events previous to being registered with the GGN, incorporating the concept of Geopark through distribution to all participants of articles about the Geopark and new attractions in the region.

Toya Usu Global Geopark, Lake Toya Marathon

Every year in May, participants: about 8,000 people (2013 record)

Toya Usu Global Geopark, Hokkaido Two Day March

Every year in September, participants: about 1,300 people (2012 record)

Toya Usu Global Geopark, Showa-shinzan International Snowball Fight Tournament

Every year in February, participants: about 1,400 people (2012 record)

Additionally, we are working to popularize the Geopark through participation community events held inside and outside of the Geopark.

Toyako Onsen Winter Festival

Every year in February, participants: about 4,000 people (2013 record)

Sobetsu Winter Festival

Every year in February, participants: about 300 people (2013 record)

Harvest Festival of North Toyoura

Every year in February, participants: about 4000 people (2013 record)

Strawberry & Pork Festival

Every year in June, participants: about 3000 people (2013 record)

Toya Industry Festival

Every year in June, participants: about 7000 people (2012 record)

Irie Jomon Shell Mounds Festival

Every year in July, participants: about 200 people (2012 record)

Toyako Canoe Camp

Every year in July, participants: about 300 people (2012 record)

Night Festival at Usu Volcano Summit

Every year in July, participants: about 1000 people (2012 record)

Date-Jomon Funkawan Bay Festival

Every year in August, participants: about 300 people (2012 record)

Date Food Festival

Every year in August, participants: about 21000 people (2012 record)

Sobetsu Apple Festival

Every year in October, participants: about 1000 people (2012 record)

Tsukiura Wine Festival

Every year in October, participants: about 1200 people (2012 record)

Ironman Japan (International Triathlon Tournament)

Every year in August, expected participants: about 2000 people (start from 2013)



Lake Toya Marathon



Hokkaido Two Day March



Mt Showa-shinzan International Snowball Fight Tournament

Tourism promotion activities

The following tourism promotion activities were performed both within Japan and abroad, with the goal of promoting the Geopark internationally.

【Abroad】

Asia (Thailand, Malaysia, etc.): 6 times 19 people

Asia (China, Korea): 4 times 28 people

【In Japan】

Tokyo: 12 times 60 people

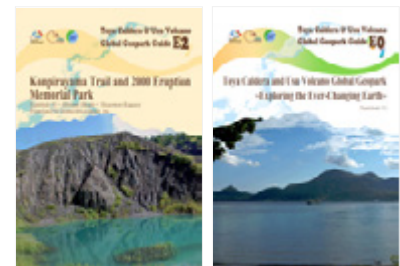
Sapporo: 16 times 80 people



Tourism promotion activities (Malaysia)

Production of Geopark Guidebook

To highlight the Geopark area for those who would like to have a deeper knowledge, we have published guidebook series to be sold in shops, museums, information centers and hotels, and to be displayed and sold on the website.



Previously published Geopark Guidebook (200 yen each)

Title		Introduction area	Author
Japanese version	00 Toya Caldera and Usu Volcano Global Geopark ~Exploring the Ever-Changing Earth~	Whole area	Academic Advisory Meetings Toya-Usu Volcano Meister Local curator
	01 Walking the Yosomi-yama (Meiji-shinzan) route	Yosomi-yama	
	02 Konpirayama Trail and 2000 Eruption Memorial Park	Konpirayama	
	03 Trail at the western Foot of Nishiyama	western Foot of Nishiyama	
	04 Usu Somma Trail	Usu Somma Trail	
	05 Explore the coastal geosites on the Volcano Bay	Volcano Bay	
	06 Explore Showa-shinzan and its surroundings	Showa-shinzan	
English version	07 Explore the Toya Caldera and its surroundings	Toya Caldera	
	E0 Toya Caldera and Usu Volcano Global Geopark ~Exploring the Ever-Changing Earth~	Whole area	
	E2 Konpirayama Trail and 2000 Eruption Memorial Park	Konpirayama	
	E3 Trail at the western Foot of Nishiyama	western Foot of Nishiyama	

Production of Geopark text for travel education

Geopark field study text for educational travel tour (for children and trainers) was developed for science classes at elementary school of Japan in March 2013. The content was edited according to the Ministry of Education's procedures with material collected by teachers from the Geopark site. For the use of this text and adoption by schools, we have implemented explanatory lecture regarding the practical use of the guide text (May 2013, 2 meetings). Distribution of the text and its implementation in various area is now underway.

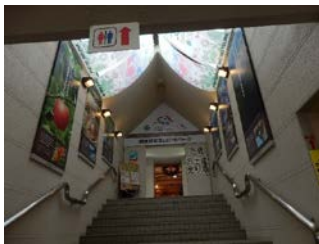


4-3 Infrastructure maintenance

The aim of the Geopark is to provide an attractive, safe tourism environment. Because it is a linking mechanism of all sorts of interactions, the main subject of the convention is that the private companies perform maintenance service along with local residents.

Council's Infrastructure

Future maintenance plans are presented according to the GGN authorization from client acceptance, implementing the following maintenance:



Geopark Exhibition Space
at the Roadside Station of Otaki

(1)"Roadside Station Forest 276 Otaki", one of the entrances from the New Chitose International Airport, was established as a new Geopark exhibition space.



Toya Lake Station Geopark Exhibition

(2)Integrated information board, reception sign and brochure corner about Geopark are maintained at Geopark Museum (16 Facilities) and Information site (6 Facilities).



Geopark General Information board
(39 sites)



Lake Toya Bus Terminal Established
Flag

(3)Implementation of Geopark signs at the following public transportation services points: JR Date Monbetsu Station, Toya Station, Toyoura Station, and Toya bus terminal.



Pamphlet Corner

(4)In order to foster collaboration with local businesses posters, catalogues of cooperating shops, and other media distributed.



(5)Information boards
Updating or renewal: 73
Newly-created:45
Total:118

Displaying of the
GGN and our
Geopark's logos.



(6)Correction of road guide signs (to include Geopark logo): 235 signs

Official Logo Marks
of this Geoparks are
displayed.

Civil Infrastructure

Mount Usu RW base and summit station

Mount Usu Ropeway Private Company (Wakasa Resort (Co., Ltd.)) established at the piedmont station the "Volcanic Geopark Village Information Center" (2011), and at the summit station the "Summit Disaster Prevention Theater" (2013), and took part in planning positive popularization activities for the Geopark.



Arutori Coast Nature House

The Volcano Meister, Mr. Shigeo Fukuda, presented an individual construction study exhibition. After the presentation it was registered in the Geopark Museum.



Hotel "Nonokaze Resort "

Established a Geopark introduction panel and a Geopark news corner.



Hotel "Toya Kanko Hotel"

Established a Geopark information corner, and disaster prevention maps.



"Lake Shore Inn Kawanami"

Establish a Geopark news corner with original Geopark goods for sale.



Hotel "Sansui Hotel"

Established a Geopark information corner, and disaster prevention maps.



4-4 Guide tour promotion activities plan

A complementary guide was provided for all Geosite visitors in order to provide information on attractions. Planning and providing of various guided tours are underway by both the private sector as well as Geopark related associations.

■ Model course and trail establishment

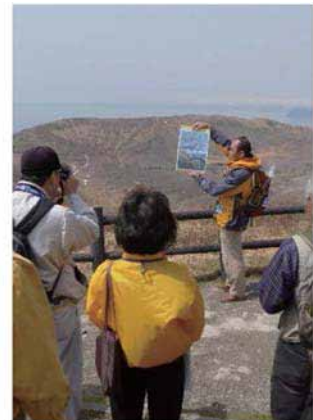
This council, after GGN certification, undertook to set a course model that connects the various attractions and trial contents of the Geopark and geosite. The trial course model leaflet (in five languages) and Geopark Guide (in two languages) were introduced. In addition, 20 courses (17 walking courses, two cycling courses) were improved via safety management. (reference: p15-p21 Geosite data book)

■ Geopark guide workshop

As a GGN member, in order to provide high hospitality to visitors, guidance is provided from geoguides such as a seminar training guide (aiming to increase participation) and guide technique study sessions in order to improve their knowledge. Each guiding organization is actively performing marketing activities such as the introduction of their services via website and brochures, and promoting initiatives that will contribute to the expansion of business opportunities.



Guide Course
(Risk Management)



Geopark Fellowship
Guide Course

- (1) To understand the principles of Geopark, guides are able to tell in their own words "The story of Geo"
- (2) Guides have enough knowledge to discuss both the entire Geopark area and the theme of the Geopark.
- (3) Guides leading field tours are responsible for visitors' safety
- (4) Guides must be able to interact with visitors from abroad

As part of the guide training program, the council provides the "Toya-Utsu Volcano Meister Training Course" (with 10 activities for each of the 379 participants), the "Geopark Partners Course" (with 7 activities for each of the 224 participants), and the "Guide Study Meetings and Exchange Meetings" (with 9 activities for each of the 103 participants).

■ Establishment of private guided tours

Our Geopark generates attraction through not only conference plans, but also proactive tour guide projects planned by local residents, NGO staff, and for-profit organizations as well.

Geopark Lake Cruise Tour

A guided Geopark lake cruise tour with including the lake's main Geopark related sightseeing spots is planned to start the summer of 2013.

This tour is guided by Toya-Usu Volcano Meister members and other experts with support of the academic advisors of our geopark



Toya Usu Volcano Geopark Sky Cruise

Helicopter tours of the Geopark featuring lake viewing with arrival and departure from the Silo Observatory were started. Geopark brochures are distributed to customers, and the pilots have the Geopark guide training.



Geopark Photo Adventure

Using plans created by the tourist association, local guides, etc., visitors take pictures and explore the Geopark, as a tour-as-game experience.



Usu Volcano Ropeway Geo Guided Tour

The Usu Volcano Ropeway provides a Geopark observatory tour in which tourists are given a guided tour from the Usu Volcano summit station over the crater floor.



Travel Agencies Tour

Various travel agencies provide Geopark Package tours which explore all elements of the Geopark.



Foreign visitors monitor tour and survey

As part of the GGN region infrastructure development, information regarding the Guide Tours as seen through the eyes of foreigners was recorded. Monitoring Tours were conducted using facility signs, brochures and other key indicators.

Hokkaido CIRs monitor tour February 2013

The opinion of 3 CIRs (Coordinators for International Relations who work for the Hokkaido Government on international exchange activities) from Canada, China and South Korea who undertook a Geopark trial tour of two days was recorded. They were satisfied with the site, facilities, signs and brochures. After the tour, they wrote the newsletters about the tour and the Geopark on the Hokkaido Government's official website in their own languages so they could be accessed globally.



International students monitor tour March 2013 (two times)

Monitor tours were undertaken by students from the Muroran Institute of Technology (nationalities: Malaysia, Indonesia, China, South Korea, Laos, Myanmar, Thailand, Philippines, Vietnam, for a total of 31 people) with the theme "Experience of Food and Volcano in Geopark".



Participating Foreign Students



Cooking class using food ingredients from Geopark sphere (Geopark's Blessings from the Earth)

Survey results showed that satisfaction with the tour was high, and it was recommended that the tour plan be utilized in future.

Domestic monitor tour and survey

Monitor tours were conducted eight times for residents, tourism operators, travel agents, media, and academics, and the survey results are being studied.



Snow trekking around Uplifted Area in 2000 Eruption and Preserved Housing



Monitor Tour for Educators



Enjoy Blessings from the Geopark

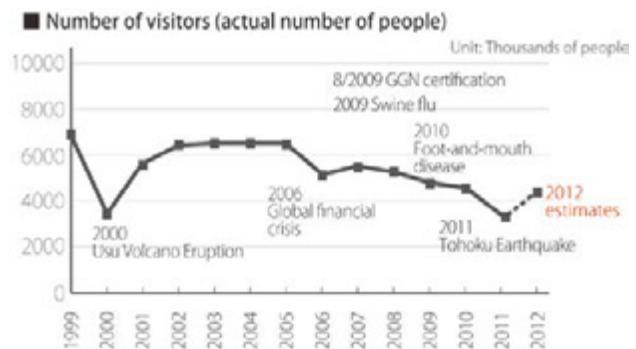
5 Sustainable economic development

5-1 Present situation of the area as a tourist attraction

Changes in tourist numbers

The West Iburi region of Hokkaido where the Geopark is located is one of the major sightseeing areas of Hokkaido. There was a downward trend in the number of tourists who visited this area, which had both domestic and international group tourists as its main target segment, whose influence was beyond the capacity of the region to counter, including the eruption of Mount Usu in 2000, the global financial crisis, the emergence of new strains of pandemic influenza, outbreaks of foot-and-mouth disease, and the 2011 Tohoku earthquake, tsunami and nuclear power plant accident.

However, through event PR on our homepage, SNS, and other platforms, and through tag team efforts with tourism associations to promote local area tourism, etc., we have made strides in developing new customer segments who utilize the guided tour. Based on this, according to the most recent data, we project an increase in the number of visitors, leaving Geopark activities with large expectations to fulfill.

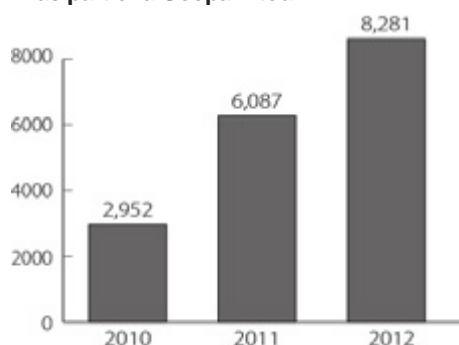


Effects of GGN certification

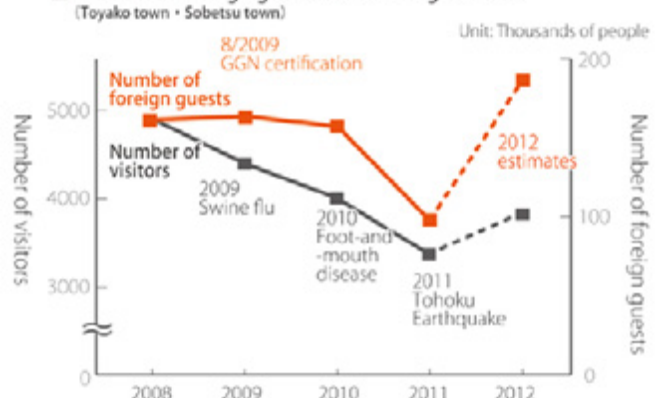
What should be emphasized as an outcome is the growth in the number of people participating in Geopark tours. The area is constantly receiving groups from research institutions on field trips, school trip groups, and so forth, both domestic and international in origin. The number of people using the cable car as part of a Geopark tour at the major Geopark site of Mount Usu was 2,952 in 2010, 6,087 in 2011, and 8,281 in 2012. These figures show rapid growth after the GGN's official recognition of the area.

In addition, the proportion of the number of visitors made up of foreign guests is increasing, and we believe that as a result of an increase in awareness of our Geopark from GGN certification that the number of foreign visitors we receive has increased overall.

■ The number of people using the cable car as part of a Geopark tour



■ Number of foreign guests and arriving tourists (Toyako town - Sobetsu town)



5-2 Strategy for sustainable economic development

The circumstances for tourism have been quite severe, as outlined above, but seeing the outcomes of activities for the promotion of the area as a Geopark (information dissemination and plans for guided tours and so on), in the future as well, the aim is for sustainable economic development through the dissemination of information beneficial for visitors and the implementation of plans for attractive guided tours.

Making the most of the Geopark's resources to “learn”, “tour”, and “enjoy its bounty”

The council together with private industry are continuing efforts to increase tourism and repeat visitors. The following are some of the activities that are being undertaken to further promote the Geopark.

(1) Learn in the Geopark

The Geopark has a volcanic terrain, geological features, ecosystem, and it is rich in history and culture, making it a destination of great interest to many who wish to study it, including school students, researchers and the general public. The Geopark has been promoted as a venue for learning, and there have been school excursions, seminars for universities and other research institutions and, through JICA, seminars for overseas scholars as well.



(2) Tour the Geopark

The rich natural environment and landscapes offer peace and healing to many visitors. Traveling in this region formed by crustal movements of the earth, one can make one's visit a recuperative retreat, and to enhance this aspect, safe trails are being developed, recommended routes for visitors are being provided, and vigorous efforts are being made to disseminate information about the region.



(3) Enjoy the bounty of the Geopark

In order to realize the continuous expansion of use of the land as a Geopark, agricultural and livestock products, wine, scenic attractions, hot springs, and experiences of coming in contact with nature are being developed anew as "the bounty of the terrain," involving brand strengthening and the establishment of new industries.



5-3 Private sector economic activities

At our Geopark, we engage in a variety of efforts, such as the creation of facilities by non-governmental groups, tour preparations, and expansion activities, which in turn expand the value of the global Geopark and have become an important force in driving the local economy forward.



Photo Album

Facility development in the private sector, new geo-tour development

Maintenance of facilities associated with the Geopark and new geo-tour plan have been developed by private sector in this region. (reprint)

Facility development in the private sector

Mount Usu RW base and summit station
Arutori Coast Nature House
Hotel "Nonokaze Resort "
Hotel "Toya Kanko Hotel"
Hotel "Lake Shore Inn Kawanami"
Hotel "Sansui Hotel"

New geo-tour development

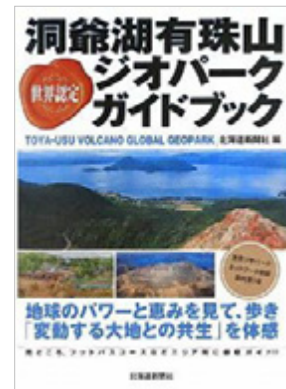
Geopark Lake Cruise Tour
Toya Usu Volcano Geopark Sky Cruise
Geopark Photo Adventure
Usu Volcano Ropeway Geo Guided Tour
Travel Agencies Tour

Cooperation with mass media

Since 2000 Usu volcano eruption, we have made efforts to promote the Geopark utilizing the strong cooperation we had with mass media, including television, radio, magazines, and newspapers which all gathered to collect and send out information during the disaster.

Below is a representative example of recent efforts.

- The publishing of the "Toya Caldera and Usu Volcano Global Geopark Guidebook" (published in 2012; ed. A5, full color, 128 pages) by the Hokkaido Shinbun Press.
- The publishing of the "Geopark Special Issue" (2011; 6 pages of space used) by the Muroran Minpo Press.



Planning and sales Geopark promotional items

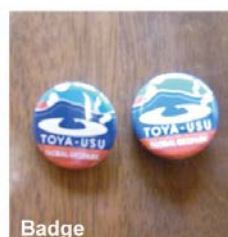
After GGN certification, business operators in the region were involved in producing various products featuring the Geopark's logo and the "image graphic". These promotional goods and products produced an economic benefit, and also served to increase people's level of familiarity with the Geopark. The cooperation between the council and the business operators is something that is desirable to expand in the future.



Polo Shirts



Mobile Phone Strap



Badge



Ball-point Pen



Bookmark

Fusion with art culture

With our Geopark as their stage, the work of artists, such as photographers and pianists, to provide photograph collections, DVD, concert activities, and more, contributed greatly to the expression of our local area's cultural attractions as well as to the Geopark's image.

Branding of regional food products

There are various well-known brands whose names are associated with the locality, including "Toyoura strawberries," "Funkawan Bay scallops," "Ohtaki mushrooms" and "Sobetsu cherries." These food products are to be actively promoted and presented in association with the Geopark itself, as "the bounty of land of the Geopark," as a cooperative effort with the region's industries for the economic development of the region.



Brand management through logo and image graphics design



In addition to its official logo, an "image graphic" has been created for the Geopark to visually convey the enjoyment of the features of the area, including the volcano and caldera scenery, and associated activities. This image is being used in media releases, on products, packaged foods, guides' badges and so forth to give the Geopark a unified brand image.

In addition, the official logo is being used on signs, information signboards, and council pamphlets. It is being put to practical use to indicate the assurance of scientific endorsement.

5-4 Use for School Excursions, etc

School excursions are held here by Elementary, Junior high, and High schools, in which students are separated from their schools for about one week and view the Geopark while learn on location. Our Geopark area is not just a place of beautiful landscapes, but is also useful for offering fieldwork and information for education on the experience of volcanic eruptions and the progress of recover thereafter, learning about disaster prevention and similar subjects.

These activities contribute to the creation of the aforementioned study materials, and through lectures and other talks by cooperating academics, to the spread of disaster prevention education and Geoparks.



6 Strategic partnerships

6-1 Coordination with the Toya Caldera & Usu Volcano Meisters

In our region, certification of “Toya-Usu Volcano Meisters” leaders in regional disaster prevention who have prepared themselves for the next eruption began in 2008; certification evaluations have taken place once a year, and 23 Meisters have currently been certified.

Volcano Meisters thoroughly study the nature and characteristics of the Toya caldera and Usu volcano area, passing on scientifically correct information, records and memories of eruptions, and their knowledge of ways to reduce disaster risk to the next generation of people both inside and outside of the area. Through these activities, as

“academic and knowledge sharing practitioners”, they have become our Geopark's messengers of information, focused mainly on disaster prevention. In actuality, the tours guided by the Volcano Meisters, who, based on their knowledge of the Usu volcano and experience of previous eruption disasters, explain a wide range of information to visitors including the attractions of the area, the blessings bestowed by the volcano, and more, provide a large sense of satisfaction to visitors.

Also, the Toya-Usu Volcano Junior Meisters, the Volcano Meisters' division for middle and high school students, conducts year-round certification and has currently certified 95 Junior Meisters. Our council is managed systematically in cooperation with Hokkaido Government and will support the Volcano Meisters' future activities.



■ Number of successful candidates for certification of the Toya Caldera & Usu Volcano Meisters

Year	2008	2009	2010	2011	2012	Total
Passer	6	5	5	5	2	23

The multifaceted activities of the Volcano Meisters

The Volcano Meisters boast a diverse membership - employees in the tourism trade, teachers, nature guides, curators, visitor center personnel, photographers, town council members, commercial & industrial association employees, and more. In 2011, the volunteer group the Toya-Usu Volcano Meister Network was formed, an educational association that not only organizes educational conferences and geotour lectures to pass on evacuation experiences from past eruptions and disaster-prevention wisdom but also enthusiastically continues to extoll the charms of the Toya-Usu Volcano Geopark far and wide, both inside and outside the region. Also, Volcano Meisters specializing in fields such as geology, ecology, archaeology, area historical research, and research studies provide robust support to the council activity through their roles as lecturers and authors of guidebooks.



Here are examples of the recent activities of the Volcano Meisters.

- Investigation of the remains of a abandoned village that became part of Showa-shinzan during its eruption
- On-site study of springs surrounding Mt. Usu (continuous study of changes in water temperature and quantity)
- Development of on-lake geotour around the Toya Caldera geosite
- Visitor survey
- Geosite conservation patrol activities

■ Cooperation with area schools

To cultivate the talent needed to support the area in the future, we're making an effort to popularize the Geopark and provide volcano disaster-prevention education, and after obtaining our GGN certification, are calling upon area schools to become proactively involved with the park. The number of uses of the geosite jumped from 1,498 people in 2008 to 3,877 in 2011, with increased use observed from all towns. Also, since 2012, we've made it our goal to engage in more active promotion of the Geopark in our local educational institutions, such as the Volcano Meisters' outreach to local schools.

Examples of recent activities are listed below.

Children's local history lectures

A local history course aimed at local children, conducted since 1983 and promoting volcano education, particularly in regard to the region's coexistence with the volcano, and a mountain climbers' association.

The Geopark in overview

A course has been developed for the curriculum of the local middle school (Soubetsu Middle School) that will study the Geopark for three years and provide continuous education in "Geoparkology."

Toyako Onsen Elementary School: eruption memorial ceremony, October 24, 2012,

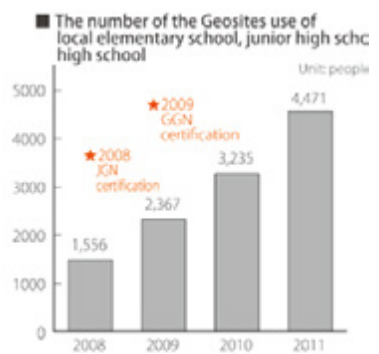
Due to the mudflow disaster of 1978 that occurred as a result of the Usu volcano eruption, starting in the 2012 school year, the Volcano Meisters have been dispatched to a memorial service held every year to honor the victims of a mudslide in the 1977 eruption who attended the school. They serve as lecturers who discuss the characteristics of the Usu volcano and its past eruptions.

High school leadership workshop: August 2, 2012

Prior to the disaster-prevention camp, a workshop was held to train high-school leaders, and academic board of council lectured on Usu Volcano and other subjects.

Disaster prevention camp: August 17 to August 19, 2012

Starting with thirty participants - students from elementary, middle, and high school and their parents & guardians - a training camp was held to simulate everyday life in a public disaster shelter and learn what exact actions to take in the case of an eruption.



6-2 Academic Advisory Meetings

This Committee was established at the same time as the Promotion Council, to offer scientific advice and proposals on the Geopark and Promotion Council efforts based on scholarly expertise. The members include experts in a variety of fields, including volcanology, geology, disaster prevention, ecology, and archeology, and they have provided us with advice on implementing research and conservation, education and awareness-raising, and Geotourism. In addition, the committee members have contributed to awareness of the Geopark, by discussing the Geopark's programs in research presentations at scholarly conferences both domestically and internationally.

6-3 Coordinating with Other Organizations

This Geopark build a cooperative partnership with various organizations working in this area, residents organizations such as the NPO Geopark Friendship Association and Toya-Usu volcano Meister network, schools and educational institutions, private companies, public institutions, government agencies, disaster management agencies. We could obtain large power, in a variety of situations such as enhancement of both hardware and software integrations, human support, information exchange, development of transportation and infrastructure, promotion of various disaster management business, and support for information dissemination.

In addition, while the Geopark provides research locations and materials to research organizations such as universities and geological surveys and their researchers, we also coordinate and cooperate with these organizations in publicizing scholarly knowledge and research results, attracting student training programs, introducing the Geopark at scholarly conferences, and more.

Organization	Details
Museum	Toyako Visitor Centre (Ministry of Environment) Kitakogane Shell Mound Information Center (Municipal, Date City) Mimatsu Masao Memorial Museum (Private) Regionally, there are 15 of these types of facility. The Network of Volcanological Museum in Japan (10 museums in Japan)
Geological Survey	Geological Survey of Japan Geological Survey of Hokkaido
Universities	Graduate schools of Science, Hokkaido University Rakuno Gakuen University DateCity Institute of Funkawan Culture
Travel agencies & agents	All Nippon Travel Agents Association, Hokkaido branch
Joint ventures	The Hokkaido Education Research Institute Science Education Center
(Public) Agencies & institutions	Utsunomiya Volcanic Disaster Prevention Committee Sapporo District Meteorological Observatory, Muroran Local Meteorological Observatory Hokkaido Regional Forest Office, Ministry of Agriculture, Forestry and Fisheries Muroran Development and Construction Department, Ministry of Land, Infrastructure, Transport and Tourism Hokkaido Regional Development Bureau Muroran Department of Public Works Management, Iburi General Subprefectural Bureau, Hokkaido Government

6-4 Establishment of human cooperation by inspections acceptance

Since our GGN certification in 2009, we have hosted inspections from overseas educational institutions and presented the results.

■ Hosting overseas Inspections

Jeju Island Geopark

A three-person inspection team (lead by Prof. Kyung Sik Woo) observed the park for three days and subsequently exchanged ideas on geosite conservation and uses.

Korea DMZ Geopark

May 17, 2012 (Thurs.), two-person team; head office visit; Geopark basic information exchange, exchange of ideas.

Mt. St Helens and Mt. Usu revegetation contrast inspection

July 21-23, 2010, five inspectors total (one from England, one from Korea)

Activities at the International Young Researchers' Convention

At the International Workshop on Progress of Research for Disaster Mitigation of Earthquakes and Volcanic Eruptions in the North Pacific Region (5/12/10), a group of young researchers on a Japan-U.S. cultural exchange toured Mt. Usu as an inspection destination.

■ Hosting Domestic Inspections

Domestic Research Institutions

We host area inspections conducted continuously as part of the research of the earth sciences department at the following university:

University of Tokyo, Waseda University, Tokyo University of Science, Hokkaido University, Toyama University, Tohoku University, Kanazawa University etc.

Domestic Geoparks and Other Institutions

Results of hosting inspection of the Geopark by other domestic institutions came to a total of 430 people over 52 times.



7 Contribution towards the work of the Network

7-1 Contribution to Mutual Exchange with other Geoparks

Participation in and Cooperative Formation of GGN

As a member of the Global Geopark Network, which continues to pursue the UNESCO initiative, while participating in GGN and APGN conferences, and building connections between GGN members, we have been actively engaged in promoting the activities of Geoparks and revitalizing the network.



4th International Geoparks Conference
(Langkawi - Malaysia)

Mutual Visits with Huangshan City and Jeju Island

In July 2009, Lake Toya entered into an agreement to become "Friendly Lakes" with Taiping lake, part of the Huangshan Geopark in Huangshan City in Anhui province. Since then, mutual visits have taken place, twice from Toya-Usu Global Geopark to Huangshan city, with 18 participants in total (2010, 2011), and twice from Huangshan to Toya-Usu Global Geopark, with 19 participants in total (2011, 2012). During these visits, members exchanged ideas on many topics including Geopark promotion and attracting sightseers.



Guided Tour along the Trail at the foot of Nishiyama by Hiromu Okada Geopark Academic Advisor and Takashi Ishihata Volcano Meister

Also, in 2011 from August 13th to 15th, three members of South Korea's Jeju Island Global Geopark including professor Woo, Kyong Sik came to view local geosites, after which ideas were exchanged regarding their conservation status. Furthermore, along with a visit from two people (Hokkaido Government Officials) from our Geopark to Jeju Island in May, 2013, in July, 2013 Jeju Island's Governor Woo, Keun-min and other government officials plan on visiting our Geopark, joining a guided tour and meeting with Hokkaido Governor Takahashi, Harumi to exchange ideas including those about how both parties can maintain the Geopark exchange.

Exchange with Domestic Geoparks

As a Global Geopark, we accept inspections from and mutual exchange with various regions within Japan with Geoparks or areas aiming to be designated as Geoparks. Through these activities we exchange various types of information and carry out cooperative projects.



Elementary School Student Registration from Mt. Apoi Geopark (Japanese National Geopark)



3 JGN Region Incorporation Seminar



Japan Geopark National Convention Participation

7-2 Contribution to Academic Research

Research Activities

At our Geopark, we work in tandem with researchers, research institutions, and other groups to carry out the excavation of local area resources, the assignment of scientific authority for research as well as policies for resource utilization, and more. Furthermore, as we provide researchers with fields to work in and materials, we receive advice for Geopark activities based on the latest research knowledge.

In addition, we organize collections of academic dissertations, literature, and operational reports regarding research held at our Geopark, and utilize it to grasp the latest academic information regarding our Geopark, for investigations into equipment policy and site use, for distribution of information, and more. We have cited the results of research conducted at our Geopark in a separate volume (volume 3).

Research and Presentation Activities

Our Geopark presents the results of our Geopark activities, in academic societies in many fields including International Geopark Conventions, earth and planetary science, volcano, and disaster information, we take part in exchange in these circles, and contribute to improving the international value of Geoparks.

The table below shows the records of participation in international conferences, academic societies, etc.

International conference

Conference	Date	Participants	Records of presentation
GGN			
3rd International Geoparks Conference 2008 (Osnabrueck - Germany)	June 2008	Head of Secretariat: Shouji Kimura / Academic adviser: Hiromu Okada (One other people)	Oral presentation 1 person
4th International Geoparks Conference 2010 (LangKawi - Malaysia)	Apr. 2010	Chairman: Kiyoshi Yamanaka / Academic adviser: Hiromu Okada (Six other people)	Oral presentation 1 person / Geopark Fair exhibition
5th International Geoparks Conference 2012 (Unzen - Japan)	Apr. 2012	Chairman: Toshiharu Maya / Academic adviser: Hiromu Okada (Nine other people)	Oral presentation 1 person / Poster presentation 1 person / Geopark Fair exhibition
APGN			
2nd Asia-Pacific Geoparks Network Symposium (Hanoi - Vietnam)	July 2011	Council auditor: Hidetoshi Sato / Academic adviser: Hiromu Okada (Five other people)	Oral presentation 2 people / Poster presentation 1 person / Geopark Fair exhibition
3rd Asia-Pacific Geoparks Network Symposium (Jeju - Korea)	Sept. 2013	Chairman: Toshiharu Maya / Academic adviser: Hiromu Okada (Other)	Oral presentation 2 people / Poster presentation 1 person / Geopark Fair exhibition
IAVCEI			
International Association of Volcanology and Chemistry of the Earth's Interior 2013 (Kagoshima - Japan)	July 2013	Academic adviser: Hiromu Okada (Two other people)	Poster presentation 5 people

COV			
Cities on Volcanos 6 Tenerife 2010	May 2010	Academic adviser: Hiromu Okada	
Other International Symposium			
Philippine		Academic adviser: Saburo Mimatsu	Oral presentation 1 person

Domestic conference

Conference	Date	Participants	Records of presentation
Japanese Geoparks Network Conference			
1st JGN conference in Itoigawa Global Geopark	Aug. 2010	Chairman: Kiyoshi Yamanaka / Academic adviser: Hiromu Okada (18 other people)	Poster presentation 1 person
2nd JGN conference in Toya-Usu Volcano Global Geopark	Sept. 2011.9	the site	Poster presentation 26 people
3rd JGN Conference in the Muroto Global Geopark	Nov. 2012	Chairman: Toshiharu Maya / Academic adviser: Wataru Hirose (15 other people)	Poster presentation 1 person / Geopark Fair exhibition
The Volcanological Society of Japan			
Volcanological Society of Japan Fall Meeting	Oct. 2010	Academic adviser: Saburo Mimatsu / Head of Secretariat: Toshiya Tanabe	Oral presentation 2 people
Japan Geoscience Union Meeting			
Japan Geoscience Union Meeting 2010	May 2010	Head of Secretariat: Shouji Kimura / Academic adviser: Hiromu Okada	Oral presentation 1 person / Poster presentation 1 person
Japan Geoscience Union Meeting 2011	May 2011	Chairman: Toshiharu Maya / Academic adviser: Hiromu Okada (Four other people)	Oral presentation 1 person / Poster presentation 1 person
Japan Geoscience Union Meeting 2012	May 2012	Academic adviser: Wataru Hirose (Two other people)	Poster presentation 1 person
Japan Geoscience Union Meeting 2013	May 2013	Chairman: Toshiharu Maya / Academic adviser: Tadahide Ui (Three other people)	Poster presentation 1 person
Other			
San'in Kaigan Global Geopark International Academic Conference 2011	Oct. 2011	Academic adviser: Hiromu Okada (One other people)	Poster presentation 1 person

Researcher Training

Our Geopark holds abundant resources useful for research in geology, geophysics, volcanology, ecology, archaeology, and hospitality studies, and we offer our park as a site for fieldwork research in these fields by universities and other research institutions. We also offer consolidated scientific resources from around the world. The provision of fieldwork and resources creates a valuable opportunity for mutually beneficial outcomes such as deepening researchers' understandings of the Geopark, sharing information with academic societies and other outlets, and connecting academic knowledge with promotional activities for the Geopark.

7-3 Contribution by Accepting JICA Trainees

Our Geopark cooperates with JICA (Japanese International Cooperation Agency) projects, and accepts trainees from all over the world. Volcano Meisters, academic staff, and administration staff serve as lecturers, and through visits and lectures, introduce our Geopark activities and results to trainees from all the world's countries, calling on them to understand and take part in Geoparks. Especially, an alumnus of this program from Guatemala is actually working with his associate to launch Geopark activities in his country.



Central and South America Region Volcanic Disaster Prevention and Management Study

Record: 13 times (total of 26 countries, 135 participants)

(1) Central and South America Region Volcanic Disaster Prevention and Management Study (JICA Hokkaido)
September 8th (Tuesday) ~ 11th (Friday), 2009 Trainees from Guatemala, Chile, Ecuador Total of 10 Participants
June 30th (Wednesday) ~ July 3rd (Saturday), 2010 Trainees from Guatemala, Chile, Ecuador, Costa Rica, Columbia Total of 10 Participants
June 22nd (Wednesday) ~ 25th (Saturday), 2011 Trainees from Guatemala, Chile, Ecuador, Costa Rica, Columbia, and Nicaragua Total of 11 Participants
June 20th (Wednesday) ~ 23rd (Saturday) 2012 Trainees from Guatemala, Chile, Ecuador, Columbia, and Nicaragua Total of 8 Participants
June 19th (Sunday) ~ 22nd (Saturday), 2013 Trainees from Guatemala, Chile, Ecuador, Columbia, Nicaragua, and El Salvador Total of 10 Participants
(2) Central and South America Region Supervisors of Disaster Policy Study (JICA Kobe)
November 14th (Sunday) ~ 17th (Wednesday), 2010 Trainees from Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, and Panama
November 21st (Monday) ~ 23rd (Wednesday), 2011 Trainees from Costa Rica, El Salvador, Guatemala, Honduras Total of 9 Participants
October 10th (Saturday) ~ 13th (Tuesday), 2012 Trainees from Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, and Panama Total of 14 Participants
(3) Central and South America Region Participation Based Regional Presentation for Advancement of Local Administration Study
May 23rd (Thursday), 2013 Trainees from Dominican Republic, Guatemala, Honduras, Columbia, and Paraguay Total of 15 Participants
(4) Africa, Middle East, East Asia Region Urban Planning and Community Development Administrative Officials
November 8th (Thursday), 2012 Trainees from Ghana, The Philippines, Sierra Leone, Iraq, Kosovo, Tanzania, and Sudan Total of 11 Participants
(5) Central Asia Region Local Road Maintenance Management Training
December 8th (Tuesday), 2009 Trainees from Kazakhstan and Turkmenistan Total of 6 Participants
December 4th (Saturday), 2010 Trainees from Kazakhstan, Kyrgyzstan, and Turkmenistan Total of 10 Participants
(6) Biodiversity Information System
September 15th (Saturday), 2013 Trainees from Argentina, China, Honduras, Myanmar, Papua New Guinea, and Republic of South Africa Total of 8 Participants

8 Current response situation in regard to the findings

Up to date correspondence in regard to the findings at the time of registration authorization is as follows.

8-1 Inadequacies in English translation/ the need to translate more materials

- After GGN certification, we've moved forward with the multilingual translation of information signboards and pamphlets, reproducing them in two to five foreign languages (English, Chinese [traditional and simplified], and Korean).
- The translations of these materials and information boards can be found in the appendix.

8-2 The explanation on information plaques, etc. is too detailed and difficult for the average person to understand

- We are revising the explanation where necessary to a more clear and simple format in line with these new standards as information is being updated.
- The new standards consist of 45 items, and the new information consists of 73 items (See appendix).

8-3 The need to revise our core concept from “Eco-museum” to “Geopark”, and to begin taking advantage of the safeguards and practices in place for GGN sanctioned geological heritage sites

- While we have aimed to make use of regional resources in the three areas covered by “Blessings of the Volcano”, “Ancestral History with the Blessing of the Sea”, and “Blessing of the Earth” in the Eco-museum, in the Geopark we are tackling the telling of Toya Caldera's “History of Man's Coexistence with the Ever-changing Earth” in a chronological fashion, as well as the regional promotion of site conservation, education outreach, guide activities, and Geotourism, etc., as laid out by the GGN guidelines. In addition, we have updated all of the existing guide markers and explanation signs, maintained in accordance with the plans of the Eco-museum, into the Geopark format.

8-4 We need protection for sites susceptible to natural deterioration

- The conservation policies are clearly outlined in the Toya Caldera and Usu Volcano Global Geopark Master Plan (Sec. 4, Par. 2), protections on both the national and local government level serving as an anchor, complemented by the cooperation of councils and residents groups in regard to maintenance management and conservation efforts. (See Conservation Measures in Section 3. above)

8-5 Inadequacies in selling the allure of the Geopark by means of billboards and all other types of advertisement

- Since GGN certification, we have been developing information transmission via web, pamphlets, information boards, museums, information booths, public transport advertisements, and various other mediums. (See Section 4., Post Global Certification Marketplace Strategies and Promotional Efforts above)

8-6 The activities related to the underutilized materials (such as the dam erosion control system) and the appeal of the volcano's relation to regional agriculture are lacking

- In accordance with the geosite selection policies outlined in the Toya Caldera and Usu Volcano Global Geopark Master Plan, we can receive proposals from local inhabitants and authorities to draft amendments so long as they are organized by an assembly that includes scientists on its staff. After approving these amendments, 22 geopoints and 13 trails have been added.

- As for the dam erosion control system, the volcanic remains that fall under the existing erosion control systems at this Geopark are being boldly emphasized in guide tour commentaries. These erosion control systems are additionally referenced in the Geopark guidebook, educational tests oriented towards the Geopark, the walking trail brochures and maps, and other park literature.



- As for the volcano's relation with regional industry, we are expanding park appeal by introducing agricultural and animal products, marine products, “foodstuffs” such as wine, scenery, onsen (hot springs) and the like as “Geo-Blessings”. (See Section 5. Continuing Economic Development)

8-7 The need for tour guide systematization and continuous training

- There are seven groups in attendance at this council's guide committee meeting. They are divided into volcanic remains, disaster experience, nature, history, culture, and many other fields to carry out tours. These groups go on record as having managed to guide a total of 36,660 people (2011).



- As for the systematization of guides, with the aims of establishing a network of people responsible for the advertisement of the Geopark's wonder and worth, and of elevating the quality of the guides, we introduced and implemented the “Toya Caldera and Usu Volcano Global Geopark Partner Registration System”. To date, 73 partners have registered with the system.

- As for guide oriented training programs, we have the “Volcano Meister Training Unit,” the “Geopark Partner Training Unit,” and the “Guide Collaboration and Study Group.” Moreover, by means of the Geopark Partner Registration System, the trainings offered independently by each guide group are made available to the others, naturally allowing for horizontal communication across fellow groups.