

Ten Years of the Itoigawa Geopark, Backed by the Function of a Regional Museum

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Located in the Itoigawa Geopark, the Fossa Magna Museum opened in 1994 as geological museum. Prior to Geopark Certification, the four functions of the museum (research, education, exhibition, preservation) laid the foundation for the creation of the Geopark and continues to contribute to the immediate advancement of Geopark Activities following certification. The following will introduce some of the roles, effects and issues regarding the Geopark and museum functions.

With regard to the field of research, the museum has participated in the reevaluation and summary of existing research in the field of geology (in the broad sense of the word); continued in the creation of new value in the form of new mineral discoveries, new fossil discoveries and understanding into crustal movement; and increased the value of Itoigawa from a geological perspective. Also, the museum has continued surveys of topography and geology and how they relate to natural disasters and cultural history (jade culture, natural disasters, old mines, terraced rice fields, etc.). The results of these surveys have been published in the Museum Research Reports and science journals. Curators at the museum became aware of the latter research topics as they found that topics related to everyday life were easier to understand and increased local citizens' interest in geology. Their awareness of their role as researchers with a very close connection to their region also influenced research in these fields. The result of this research can be seen in the 2008 Global Geoparks Network Application, which described "24 Sights, Story of People and the Land (A "Geo Story").

In the field of education, Earth Science Seminars (Adult Lectures), the Omoshiro Museum (Children Hands-on Learning), and Earth Science Hiking (Outdoor Lectures) have formed the three pillars of activity. The number of geology enthusiasts has increased in absolute terms among local citizens and in the future it is these enthusiasts who will take up the mantle of the Geopark. A Friends of the Museum Society was also formed through which we have been able to learn with local people and continue to work together to unravel local mysteries. Through these efforts, local citizens have discovered new minerals and new fossils, contributed to scientific publications, and work in the Geopark as certified Geopark Guides. In particular the Earth Science Hiking has been invaluable in discovering new geological sites of interest which later became important sites in the Itoigawa Geopark. The museum has also developed educational programs and materials and been particularly successful in receiving school excursions since becoming a Geopark. The museum also assists in publication activities, providing clear photographs and easy-to-understand illustrations.

In the field of exhibition, adjustments and improvements to exhibition methods have allowed the museum curators to learn how to better teach geology to visitors. This experience was put to use in 2015 when the museum was completely renovated. In 1991, the word "Geopark" was first applied (by Miyajima) to outdoor geological sites in Itoigawa. Outdoor explanation panels were also installed and the first geo tours and Earth Science Hiking began at this time. Currently, work is underway to renovate the Fossa Magna Park (a park featuring an exposed section of a fault of the Itoigawa-Shizuoka Tectonic Line). This renovation focuses on improving the park's visibility and conservation.

With regard to preservation activities, the museum acts as a repository for jade and other valuable stones, minerals and fossils which would otherwise be sold or otherwise lost.

On the other hand, the following issue cannot be ignored. In the past ten years since becoming a Geopark, of the four functions of the museum, educational activities have taken an excessively large priority over the other three. This is due to the increase in regular visitors and school groups to the museum. The curators now have little time to devote to their other duties including research, material organization, publishing and the creation of exhibits founded on current research results. This puts the museum's sustainability in jeopardy. It is vital to develop a solution to this issue in some way, by reducing the current workload, increasing the number of curators, working with local people or universities to manage the museum, or some other, as of yet unknown solution.

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