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研究課題名: Aesthetic preferences of different types of tourists

for grassland landscape in Aso

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1. Introduction

Grassland landscape is a landscape composed of grassland with aesthetics, ecological value, tourist attraction function and tourist appreciation value. According to Ogura (2006), grasslands once covered one-third of Japan's land surface. In today, the area of grassland is about 430,000 ha, which accounts for only 1% of the country. Except for the Aso region, you can rarely see vast area of grasslands. Aso is located in the center of Kyushu, Japan. In 1934, it was recognized as a national park, and it was also recognized as FAO Globally Important Agricultural Heritage Systems. For centuries, humans have been engaged in agricultural activities here, such as field burning, grazing and mowing, creating a vast extent of "semi-natural" grassland. Long-term interactions between human and nature have shaped today's unique and open grassland landscape in Aso.

However, in recent years, with agricultural modernization, changes in lifestyles, and the decline of animal husbandry, grasslands used for grazing have decreased considerably. At the same time, because of the aging population, it is becoming more and more difficult for the burning activities to maintain the grassland every year. Because of the humid climate in temperate regions, if the grassland is abandoned, vegetation will continue to change over time, and eventually become forest. According to the basic survey of Kumamoto Prefecture (2011), the Aso area has about 67,000 hectares of forest and 22,000 hectares of grassland. A land-use simulation predicts that almost 50% of today's grassland area can be lost by 2050, if current trends continue. Such substantial loss of grassland areas can lead to loss of local identity or landscape characteristics, emotional bonding, and meaning that people give to the landscape. Therefore, understanding tourists' perception of the landscape is necessary for the development of local tourism.

2. Purpose of this study

If the grassland continues to lack maintenance and management and eventually become forests, will Aso retain its unique natural charm as a tourist attraction? Will tourists who come for the grassland landscape be influenced by the changing landscape in their place attachment to Aso? With these questions in mind, this study will choose the tourists of Aso to conduct the survey of landscape evaluation.

Research Methods Study Sites



The present study was mainly conducted at tourist spots and souvenir shops in Aso. The survey locations are Aso Grassland Conservation Center, Aso Volcano Museum, Aso Information Center, Minamiaso Visitor Center, CLAMP, Minamiaso Rent-a-bicycle, Senomoto Kogen Hotel, KUSHITANI CAFÉ, Roadside Station Aso, Daikanbo Tea Shop, Aso Bonosato.

Daikanbo and the Volcano Museum are the most famous tourist spots in Aso. Daikanbo is located at the highest point of Gairin Mountain, with a view of the crater basin and the Aso Five Mountains and the Kuju Mountains, surrounded by a vast grassland. Around the Volcano Museum are the smoking Nakadake and the

Kusasenrigahama grassland with a diameter of about 1 km. The scenery of cows and horses grazing leisurely is representative of Aso.

3.2 Visual preference survey

Visual preference survey is a technique for obtaining public feedback on physical design alternatives. It is often used when planning redevelopment. The participants' input is then used to make decisions about the future environment. The survey consists of a series of images that participants must score according to their preference. The images will be actual photographs and computer-simulated images depicting potential environments.

The study used Photoshop software to simulate future landscape pictures after grasslands are gradually eroded by forests.

3.3 Questionnaire

To analyze the relationship between landscape evaluation and distance and people's aesthetic differences, we used a photo-based questionnaire with 5 photo series; each series consisted of 4 photos: one real photo and four different modified versions (Forest elements from far to near).

Tourists were asked to fill in a standardized written questionnaire. The questionnaire included original photos and simulated images and some other text items. The images of landscapes were printed in color with high resolution. Respondents rated each landscape image. Moreover, respondents have to state their opinion on the statements about place attachment with the help of five-step scales, ranging from " (1): disagree" to "(5): agree". The statements will help to verify respondents' preference ratings and to interpret the findings.



Make questionnaires

Distribution of questionnaires

A total of 508 participants, 388 on-site questionnaires with a response rate of 97%; 120 questionnaires were recovered with a recovery rate of 44%. Respondents spent an average of 5-10 minutes filling out the questionnaire.

4. Future progress

Statistical analysis will use SPSS statistics. Calculate the median of ranked beauty (total respondents) for all landscape photos. Test for each group (gender, age, region, cultural background). Use the Mann-Whitney U test.

5. Thank you note

Thank you very much for being accepted by Taikichiro Mori Memorial Research Fund this time.

My research is on landscape preferences in the Aso region. I want to explore what tourists think about the disappearing grasslands, and whether they can contribute to grassland protection. So far, I have visited Aso 6 times, distributed more than 500 questionnaires in total, and collected 200 questionnaires from 9 stores.

Because of this grant, I can conduct research more easily, and I can devote myself fully to research activities. Finally, thank you very much.

References:

(1). J.Ogura, "Transition of Grassland space in Japan", Kyoto Seika University, annals no.30, 2006, p160-172

(2).Kumamoto Prefecture, "Basic survey for maintenance and restoration of Aso grassland" ,2011, p1

(3). Franz Höchtl, Susanne Lehringer (2005), "Wilderness": what it means when it becomes a reality—a case study from the southwestern Alps, Landscape and Urban Planning,85-95

(4). Theano S. Terkenli, "Tourism and Landscape", A Companion to Tourism, 2008

(5).Bagh-e Nazar, "New Approaches to the Landscape Aesthetics Research", July 2017

(6).Marc Antrop, "Why landscapes of the past are important for the future", Landscape and Urban Planning 70 ,2005,21–34

(7).Uta Schirpke, Sonja Hölzler (2013), Can We Model the Scenic Beauty of an Alpine Landscape? , Sustainability, 1080-1094; doi:10.3390/su5031080