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How Haring saw Amami under military rule: Photo exhibition for the 70th Anniversary of the reversion of the Amami Islands to Japan

ハーリングが見た軍政下の奄美 奄美群島日本復帰70周年記念・写真展



Image: Douglas Haring Papers, University Archives, Special Collections Research Center, Syracuse University Libraries

KAGOSHIMA UNIVERSITY
INTERNATIONAL CENTER FOR ISLAND STUDIES
(formerly RESEARCH CENTER FOR THE PACIFIC ISLANDS)

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Cover photo: Poster for photo exhibition for the 70th Anniversary of the reversion of the Amami Islands to Japan (by KAWAI Kei)

JSPS Core to Core
Asia Africa Science Platforms in 2021-2023

The International Center for Island Studies, Kagoshima University has been selected for the JSPS Core to Core: Asia Africa Science Platforms for three years from 2021. The project title is *Interdisciplinary Research on the Coexistence of People and Nature in Subtropical and Tropical Asian Islands*. This project aims to form a network with universities that have academic exchange agreements with Kagoshima University (University of the Philippines, Visayas, University of Sabah, Malaysia, and Patimulla University, Indonesia) to promote the formation of education and research centers, the fostering of young researchers, and joint research in tropical and subtropical Asia with the aim of "coexistence between people and nature on islands. and joint research.

Although we were only able to interact with them remotely very much during the first year due to the COVID 19, we did a variety of activities during the remaining two years. We will summarize this project and have reports from the three participating overseas universities on the results of having conducted this program.

Goals of the Project

To achieve three goals in cooperation with the domestic collaborative organization of local governments, regional researchers, academic societies in both Japan and overseas, as well as international networks, four educational and research institutes specializing in "Islands" will participate in this project. The goals that the project aims to achieve are as follows.

Goal 1) A Base for International Research: From this base, the mechanisms for maintaining endemic species and diversity across a wide area from subtropical to tropical islands will be elucidated via research, leveraging regional characteristics. Moreover, world-class research will be conducted to propose conservation measures that account for the traditional knowledge of nature rooted in the region.

Goal 2) The Nurturing of Young Researchers: Young people will be cultivated to lead the next generation and have the capacity to execute tasks. Abilities will be developed to communicate in English, independently identify problems, and formulate countermeasures.

Goal 3) Academic Development: Based on features and concepts shared across the four island areas, a new interdisciplinary "Island Studies" team will be constructed by combining diverse perspectives of not just biodiversity but also the geographical and physical aspects of the island, as well as the diverse perspectives of nature, society, and the economy of "coexistence" of people and nature.

Activities

2021

- Remote island seminar series (4 sessions hosted by each university)
- Joint research on Kagoshima islands

2022

- Kagoshima-Amami field training
- Field training for Kagoshima University students at three universities
- Joint research on Kagoshima islands

2023

- Kagoshima-Amami field training
- Kagoshima University students' field training at three overseas universities
- Remote island seminar series
- Research in Kagoshima Prefecture by young researchers in overseas universities
- Joint research on Kagoshima islands

Reports from University of the Philippines, Visayas

My JSPS Experience

Reynold D. Tan, PhD

In 2022, I had this rare opportunity to represent our University, the University of the Philippines Visayas, in the JSPS Project. Among the activities that come with our participation include co-organizing seminars, i.e., the *Interdisciplinary Research on the Coexistence of People and Nature in Subtropical and Tropical Asian Islands*, the hosting of Japanese scholars, working with Japanese experts, research presentations, and attending trainings and field trips in Kagoshima and Amami Island in Japan. JSPS also brought young researchers from our University to Japan to learn from Japanese experts and had them share their current research with an international audience. The collaboration contributed to UPV's internationalization initiatives as the University embarks on the internationalization of education to strengthen its triple mandate of instruction, knowledge generation, and public service.



Our participation in the JSPS Program has had long-lasting effects on our university. For one, it has enabled the sharing of expertise and knowledge among partner institutions. It has also uplifted UP's reputation as the premier University in the country by having partnered with other known international institutions of higher learning---thus expanding our international linkages and contributing to the professional development of program participants. Not only did we expand our

knowledge about the emerging research of our Japanese counterparts and become aware of the Japanese culture, but we were also able to experience how it is to be in Japan in so short a time. As the representative of the university, I was able to understand the cultures of other countries better, Japan in particular. Not only did the program enhance my technical skills, but it also developed my ability to work in a diverse working environment. It was also one big opportunity for me to build a global network of peers from Japan, Malaysia, Indonesia, and many more countries—networks that may lead to future collaborations. For somebody teaching a course in International Marketing, the exposure brought about by my participation in the JSPS Program enhanced my global awareness, equipping me to deliver my lessons with international context and content.

Further, my stay in Japan has led me to broaden my personal perspectives through experiences of the local culture. Not only did I learn Japanese culture, but I was also able to share the Filipino culture as well. Small gestures like bringing mango candies and talking to kids on Amami Island would leave a lasting impression on them.

On a personal note, my training made me familiar with the ASEAN Region through the country presentations I was able to attend. Perhaps the most significant learning was the realization that it takes multidisciplinary initiative to solve a problem and develop a sustainable solution.

Based on the initial collaborations that we have started, prospects I see would include joint research projects, cross-country lectures, student and faculty exchanges, and possibly mentoring.

As the Project is about to end, I can categorically say that it has achieved its purpose of promoting international exchange, shaping the next generation of young researchers, and building academic development.



Reports from University of Sabah, Malaysia

Report from Malaysian team

Baba Musta, Suraya Sintang, Farrah Anis F. Adnan & Ling Sin Yi

Three academic staff and one postgraduate student from the Faculty of Science and Natural Resources, University of Malaysia Sabah, Sabah, Malaysia attended the workshop and field training on Amami-Oshima Island and Sakura-Kinkowan Geo Park Kagoshima. The programmes involved three phases, which are 11-15 November 2022, 06-14 November 2023, and 14-21 January 2024. This programme was fully funded by the Japan Society for the Promotion of Science (JSPS).

The main objective of this programme is to strengthen international research collaboration, particularly in multidisciplinary fields, among Malaysia, Indonesia, the Philippines, and Japan. Through this project, researchers and postgraduate students be able to collaborate internationally and advance their academic and professional careers. This programme is led by Professor Kawai Kei from the International Center for Island Studies, Kagoshima University, Japan. The delegate from Malaysia is led by Prof. Baba Musta, and the members of the academic staff are Dr. Suraya Sintang and Dr. Farahanis, Fazliatul Adnan. Whereas the postgraduate student is Miss Ling Sin Yi. The programme provides a valuable opportunity for delegates to gain holistic experience and access international research levels. By bringing together academic staff and postgraduate students from various universities, the programme creates a platform for the exchange of ideas and expertise to address complex research issues without geographical boundaries.

This focus is driven by shared challenges, opportunities for synergies, and a strategic approach to regional development through collaborative research efforts. The programme conducts various activities, such as field training programmes in Kagoshima and Amami-Oshima Island, emphasizing the exchange of research knowledge alongside historical and cultural knowledge of Japan. The choice of natural environments for these activities gives insights into the research topics while also exposing participants to information on environmental conservation and sustainable development in the region. Engagement in the programme also contributes to the academic and professional growth of individuals that goes beyond traditional classroom learning of only theoretical knowledge. The fieldwork not only provides participants with experience but also enables them to acquire knowledge that can be applied in their individual home countries. Therefore, this programme emphasises critical thinking, leadership, and teamwork skills, which are essential for the participants' personal growth and future career development.

One of the notable effects of the programme is the increased visibility of academic research among participating universities in interdisciplinary fields. The mobility of academic staff and postgraduate students to Japan creates inclusivity and a diverse academic environment, thus also fostering a more comprehensive understanding of particular research topics shared by individual participants. This diversity can potentially lead to the discovery of new insights and the establishment of long-term collaborations. Participants could also expand their professional networks and build relationships with young researchers from around the world. Effective professional development opportunities, including training in cross-cultural communication, research methodology, and project management, are necessary to ensure the success of graduate students in these programs. By providing graduate students with the necessary support and resources, international research programmes can enhance their career endeavours and knowledge in their respective fields.

The future prospects of this programme aim to encourage the participation of young researchers and postgraduate students from diverse academic backgrounds, including those in social science, to join this program. Expanding the scope of the programmes in sociology and

anthropology to include a wider range of disciplines and regions could promote interdisciplinary collaboration and global understanding. Malaysia can learn the value of community on small islands in Japan that can be adapted to the small island community in Malaysia. This expansion is crucial to bringing different perspectives to the research and contributing to a more holistic understanding of various issues. In summary, the exchange of knowledge and insights facilitated by the JSPS-funded programmes for academic staff and postgraduate students from different universities is seen as a significant contributor to the advancement of scientific research and sustainable development among the participating countries. In order to strengthen the research collaboration between the participating countries, it is suggested to include social scientists in the future project.



Reports from University of Pattimura, Indonesia

Its Role, Effects and Future Prospects

Wardis Girsang, Marfin Lawalata, More Siahaya and Isye Jane Liur

Unlike continental regions, about 90% of the sea surrounds the area of small islands. Small islands have small-scale economies and a small number of populations. Small islands lack connectivity,

have few ports and transportation infrastructures, limited market access, and high logistic costs. Small islands are more sensitive to natural disasters, rising sea levels, and climate change impacts. Specifically, small islands also have a specific but small quantity of biodiversity, indigenous knowledge, and cultural diversity. In short, small islands have a complex multi-dimension coexistence relationship between nature and people, landscape and seascape areas. Therefore, studying small islands needs an interdisciplinary approach, multiple theories, and methodology. International Center for Island Studies-Kagoshima University (ICIS-KU), Japan, has developed an interdisciplinary approach to studying small islands in Japan. The research station lies on the Amami-Oshima islands. In 2021-2024, a collaboration lecture, research, and training about 'the coexistence between people and nature in small islands' was developed by ICIS-KU with three universities, namely Pattimura University, Indonesia, the University of Malaysia Sabah, Malaysia, and the University of the Philippines Visayas. This article will discuss the roles, effects, and future activities of the JSPS project.

The role of JSPS projects

The JSPS Project-ICIS-KU supported research, training, and expertise exchange between postgraduate students and academic staff between universities. The main topic concerns the coexistence between people and nature in small islands. Professor Kawai Kei led the whole projects from the International Center for Island Studies, Kagoshima University. Dr. Wardis Girsang led the delegates from Indonesia. In Indonesia, one additional academic staff from the Faculty of Agriculture, Isye Jean Liur, and two Master's degree students, Marfin Lawalata from the Faculty of Agriculture, and More Siahaya from the Faculty of Marine and Fisheries. They attended the workshop seminar and field training on Amami-Oshima Island and Sakura-Kinkowan Geo Park Kagoshima. Then, academic staff and postgraduate students from Japan also visited the University of Pattimura, Maluku, Indonesia.

Through seminars, we exchanged knowledge and experience and observed biodiversity and social culture to show the sustainable coexistence between people and nature on small islands. The exchange experience and training are essential to enrich understanding of sustainable biodiversity and culture in small islands from different perspectives and regions.

The programs involved three phases: on 11-15 November 2022 (landscape training, including forest, waterfall, seminars in Kagoshima University and Amami-Oshima islands, and visited tourism and historical places), 06-14 November 2023 (seascape training, seminars at Kagoshima University and Amami-Oshima islands, visited rivers, mangroves, and 16-26 December 2023 (one staff came to Kagoshima University for presentations research findings, visited food technology laboratory, and visited tourism sites in Kagoshima). The Japan Society for the Promotion of Science (JSPS) fully funded this international cost program. The main objective of this program is to strengthen international research collaboration on the coexistence between

people and nature in small islands, particularly in interdisciplinary fields, among Malaysia, Indonesia, the Philippines, and Japan.

Each university student and staff have a role in presenting their research findings and experiences during the training at Kagoshima University and Amami-Oshima Island research station. Research staff presented research at Kagoshima University, while postgraduate students presented research findings in the Amami-Oshima islands.

The Effects of the JSPS Projects

First, this training enriched the postgraduate students' experiences because this was the first time, they visited a University abroad (Japan) and met with students from different countries. They have increased self-confidence and broader perspectives through discussions, seminars, workshops, observations, and fieldwork training in Kagoshima city and Amami-Oshima islands. We then understand the complexity of small islands that are diverse, risky, and vulnerable to environmental, natural, climate change impacts, economic, and social-cultural. Therefore, an interdisciplinary approach is needed to comprehend the small islands' sustainable biodiversity, nature, and social culture. Second, small islands are vulnerable to natural disasters and climate change, and the economies are small-scale. Therefore, economic development in the small islands should be sustainable based on ecology and social culture sustainability. Economic growth based on excessive natural resource exploitation, e.g., deforestation and mining industry, will destroy the small islands' whole landscape, agriculture, fishery, social culture, and seascape.

Sustainable natural resources occur from the mountain landscape, rivers, farmland, and resettlements to the coastal and seascape regions. In the field, we can see the sustainable secondary forest and the world heritage conservation center for plants, animals, fish, protected mangroves, and other natural resources in the Amami-Oshima islands.

We observed that sustainable environmental resources are critical to determining the Amami- Oshima islands' sustainable economic development. In this case, sustainable natural resources and the environment are necessary to develop capital-driven investments and innovations.

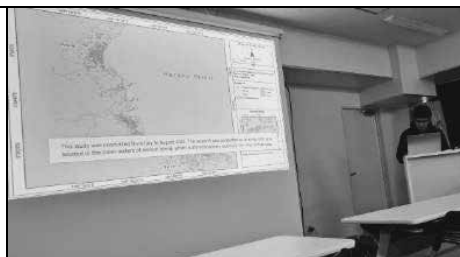


Figure 1. Indonesian postgraduate student's presentation at Amami Research Station

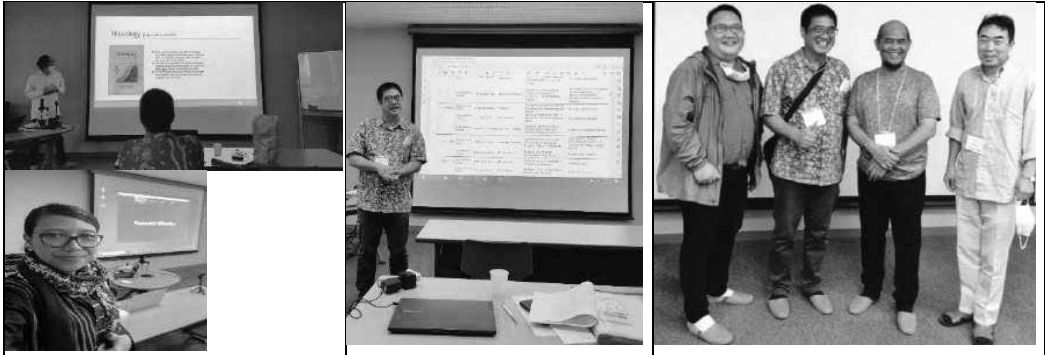


Figure 2. University staff presentations (Kagoshima Univ, Pattimura Univ, University of the Philippine Visaya, University of Malaysia Sabah, and Prof Kei Kawai), discussions, and exchange experiences at Kagoshima University



Figure 3. World heritage conservation center and mangrove forest on Amami island

Third, the core businesses of sustainable economic development in the Amami-Oshima islands are ecotourism and small-scale exporting industry products. Central and local governments collaborate to develop connectivity between and within the small islands through good airports, seaports, and communication and transportation infrastructures. The government develops food and restaurants, hotels, and travel services to support ecotourism industries. Local communities develop crafts agriculture products such as alcohols from sweet potatoes and sugarcane. Moreover, ICISKU has a pivotal role in involving local high schools in joining the JSPS international collaboration program to promote tourism in the Amami islands.

Fourth, the JSPS projects inspire students, research centers, and university staff to initiate, bridge, and strengthen interdisciplinary approaches in education, research, community services, and training about sustainable coexistence between nature and people in small island development. The projects promote linking and bridging sustainable nature, social culture, and economics: from science to business. The JSPS project has also inspired us to strengthen our University's characteristics as a center of excellence in integrated sustainable small island development in Indonesia. The specific benefits of the JSPS project are but not limited to:

1. Improve exchanges of postgraduate students and researchers between Asia and Japan who are essential in developing science and technology.
2. Train self-confidence by mingling, communicating with foreigners, and adapting to new things.
3. Develop international knowledge and understanding of cultural and societal perspectives.
4. Enhance the network and the spirit of small islands' education and research within and between countries.

Fourth, fishery development based on the principle of 'from fishing to farming' or 'from fishing to aquaculture' is challenging. We visited the aquaculture business in the Amami island region that belongs to Kindai University as a lead in aquaculture business development from fishing to farming. They develop Research and Development for the aquaculture business industry, especially bluefin tuna fish cages in the small islands. This business is profitable and become the University's core income source. This is an example of the University's positive impacts on developing natural resources in the small islands, local community, R&D and University, and business community. This is called a strategic role of the University to transform science into business and community services.

Social, cultural, and ecological factors are the foundation of ecotourism development on small islands. In Kagoshima city and Amami-Oshima islands, there are many tourist sites to attract people from other cities and countries to visit the islands.

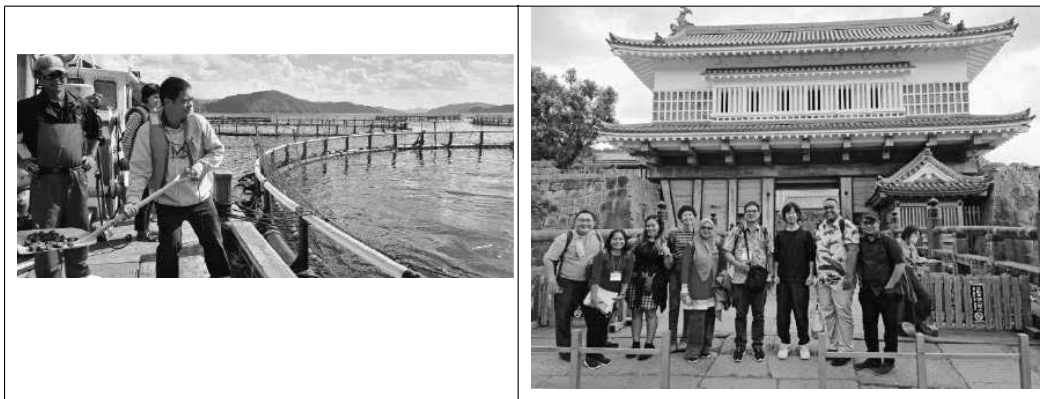


Figure 4. Aquaculture business "from fishing to farming" in Amami islands (left) and Museum and historical sites in Kagoshima city (right)

Future prospects

The collaboration prospects are to develop more advanced education and research exchange experiences among these universities (ICIS-KU, Japan, University of Pattimura-Indonesia, University of Sabah Malaysia, and University of the Philippines Visaya). In academic activities,

we must develop an online lecture (zoom) exchange involving undergraduate and postgraduate students and researchers from different interdisciplinary fields. This activity is more efficient for exchanging knowledge between universities in line with small island developments. We do hope that students and university staff will have the same perception and perspective about the sustainability of biodiversity, nature, environment, people, and culture in the small islands.



Figure 5. Training participants with certificates in the Amami-Oshima research station building

In research activities, these universities can share research funding and research findings presented in the international seminar. This international seminar will attract researchers and university staff from existing universities and other universities in different countries that have relevant topics in line with small island development. The other collaborative works are writing academic journal articles, book chapters, and books about the coexistence of nature and people on small islands.

ICIS-KU Japan should be the model and leading University for sustainable small-island development in the Asia-Pacific. Small islands are the priority subjects of all university students, including the faculty of medicine. Collaborative and interdisciplinary research involving scientists from different faculty and study fields has applied. Some research studies and books about small islands have been published. The University has developed a permanent research station on the Amami and Oshima islands, supported by the local government and relevant stakeholders. Moreover, ICIS-KU has also developed network collaboration with many universities worldwide through research, education, training, and visiting scientists. These are the foundation for the ICIS-KU as the center and leading University for sustainable small island development. This can be used as a good practice for universities with small island characteristics in Asia and Africa, especially in eastern Indonesia.

This project has inspired to boost a strong led international collaboration for sustainable small island development. Thanks to Prof Kei Kawai, JSPS project leader, and all postgraduate students and university staff from ICIS-Kagoshima University, Japan, University of Sabah Malaysia, University of the Philippine Visayas, and all students and staff from Pattimura University, Indonesia.

Research Seminars/ Special Seminars

No.228, 24 April 2023

“The Religious Cultures and its Relation to Shrines in the Amami Islands”

MACHI Taiki (Department of Liberal Arts and Sciences, Kagoshima College)

[ABSTRACT]

The Amami archipelago is known as a region with local religious cultures such as village rituals by Noro (female priests licensed by the Ryukyu Kingdom) and Yuta shamanism. These local religious cultures have declined since the Meiji period (1868 - 1912) due to Haibutsu-kishaku (the anti-Buddhist movement) and the spread of foreign religions. However, the relationship between local religious cultures and foreign religions is not only conflicting but also harmonious. In particular, shrines are rich in such diversity. Some shrines played an important role in suppressing the local religious cultures during Haibutsu-kishaku. Also some shrines have functioned as a receptacle for local religious cultures. For example, some shrines had been used as a ceremony place by Noro, and some were established based on the local tales of heroism. I have been interested in the transformation of the religious cultures of the Amami Islands in modern times, and have conducted research on the transformation of the funeral system in Yoron Island and the relationship between folk beliefs and shrines. In this presentation, I will throw light on the significance of the focus on shrines to understand the religious cultures of the Amami Islands. Moreover, I will consider the relationship between local religious cultures and shrines, based on examples of shrines in the Amami Islands and the stories of the people who manage them.

No.229, 20 May 2023

“*Dagaa* Industry in Zanzibar Islands: Significance as a Protein Food Supply for Inland Countries”

FUJIMOTO Mariko (Faculty of Fisheries, Kagoshima University)

[ABSTRACT]

Zanzibar, an Indian Ocean Island region in Tanzania, has a thriving anchovy fishing and processing industry. Anchovies and other small fish in general are called *dagaa* in Swahili language. *Dagaa* is a familiar and important protein source that can be called the national dish of Tanzania. This presentation introduces the *dagaa* processing industry in various areas of Tanzania, with particular focus on the dried anchovy processing industry in Zanzibar.

Zanzibar is about an hour and a half by ferry from Dar es Salaam, the prime city of Tanzania. Many merchants from the inland Democratic Republic of the Congo (hereafter referred to as D.R. Congo) visit these remote islands area to buy large quantities of dried anchovy and send them back to their home countries. In D.R. Congo, people's infrastructure was destroyed due to the civil war that broke out in the 90's and the political instability that followed. Many refugees

continued to be forced to use wild animals as protein food in the tropical rainforests. Wild animals are rapidly declining, and in recent years, people's protein sources have shifted from meat to fish.

I investigated the anchovy fishery in Zanzibar, the middlemen's processing industry, and the trade practices among Congolese merchants and local middlemen, and clarified the food chain of *dagaa*. And I conducted a field survey in Lubumbashi, the second largest city of D.R. Congo and revealed that dried anchovy (*dagaa*) of Zanzibar is distributed not only in D.R. Congo but also in neighboring countries. In this presentation, I introduce the *dagaa* industry in Zanzibar and tried to discuss its significance in terms of protein food supply to inland countries.

No.230, 19 June 2023

“The Basic Research of Roast Salt-Making Pot in Amami Islands”

YOMINE Yukiya (Isen Town Board of Education)

[ABSTRACT]

It is known that Kyushu manufactured roast salt-making pots (the cloth impressed pot; RSMs hereafter) has been recovered from the Amami Islands. While it is said that the RSMs were introduced from Kyushu, some scholars think that they were produced in the islands because similar tempering materials used in both RSMs and locally manufactured pottery. Therefore, it is possible that RSMs were manufactured in the islands. In addition, it might indicate the social organizations in the Amami Islands during the Late 2 period.

In order to clarify similarities and differences between the RSMs recovered from the islands and the mainland Kagoshima, I have examined the RSMs unearthed from these regions. Furthermore, I have studied the RSMs collected in the islands in detail. As a result, they are similar in the form and using of cloth inside surface of the pots. On the other hand, tempering materials, manufacturing technics and periods of manufacture are different.

The result of the analysis has led me to conclude that RSMs recovered in the islands were manufactured and distributed within the islands. Also, I think that the salt making technic was diffused from Kyushu to the Amami Islands. Why salt making begun during the 9th AD? One possibility is that the introductions of agriculture and blacksmithing technology around this time demanded a larger amount of salt for the newly arrived industries. Probably salt production was centered in Amami Oshima. Tokunoshima and Okinoerabu-jima might have played some role for the salt production. Kikaijima was one of the major consumers of locally produced salt.

No.231, 18 July 2023

“The Current Progress of Research on ISSHIKI Jiro”

SUZUKI Yusaku (Center for Modern Kagoshima Studies, Kagoshima University)

[ABSTRACT]

In this presentation, I will discuss the current state of research on Jiro ISSHIKI (1916-1988), a writer from Okinoerabujima Island. ISSHIKI was twice a nominee for the Naoki Prize for "Winter

Journey" (1949) and "Lonely Wild Goose" (1961). In 1967, he won the 3rd Dazai Osamu Prize for "Seigenki", which was made into a movie in 1973 and shown in countries around the world. He also won the Kikuchi Kan Prize for co-editing "Tokyo Air Raid and War Disaster Chronicle" (1974) and the Sankei Children's Publishing Culture Award for "Leap Out at the Coral Reef" (1975). Despite having been an active author during his lifetime, there are not many people who know about ISSHIKI even in Okinoerabujima today, and he is rarely mentioned in the history of literature. The presenter intends to advance the research on Jiro ISSHIKI and promote the momentum for reevaluation.

Firstly, I point out that the discourse surrounding ISSHIKI has focused on "Seigenki," a story about his interactions with his mother who suffered from tuberculosis, and "The Sun and the Chain" (1964), which deals with his father's wrongful conviction and death. Thus, ISSHIKI's literature is generally recognized in the division of "before and after 'Seigenki.'" Secondly, In order to comprehensively understand ISSHIKI's literature, the presenter advocates for a new, more detailed chronological division: 1) two collections of creative works published when he was 19-20 years old as the starting point; 2) biographies of great men and adventure novels for boys and girls before the award of "Seigenki"; 3) pure literary works written in literary magazines during the same period as 2); 4) "Seigenki"; 5) works related to the movement to abolish the death penalty, in which he himself participated, such as "Evil Nature" (1979), following "Seigenki." In addition, I introduce the results of primary source research on ISSHIKI, including research on Okinoerabujima Island.

No.232, 25 September 2023

“A Study on Hermit Crabs and their Associated Symbionts in the Indo-West Pacific Ocean, Including the Amami Islands”

YOSHIKAWA Akihiro (International Center for Island Studies, Amami Station, Kagoshima University)

[ABSTRACT]

Most hermit crab species inhabit oceanic environments even though many people consider terrestrial hermit crabs, which inhabit bushes and forests near seashores, as the typical hermit crab. A phylogenetic, taxonomical, and ethnological study was conducted on the hermit crab and its symbionts that live in the intertidal zone and deep-sea floor, ranging in depth from 200 m to 500 m, focusing on their evolution and symbiotic relationships. This presentation aims to introduce our research team's previous study on these animals and increase public awareness of “hermit crabs in the marine environment” among the people living on the Amami Islands, Japan.

Hermit crab species usually inhabit dead gastropod snail shells. Since these shells do not grow and expand their shell structure, hermit crabs change their host shells when encountering more favorable shells. Moreover, a symbiotic animal (e.g., sea anemone or gastropod) often lives inside or outside the shells occupied by hermit crabs. The symbiotic animal, however, cannot easily

change its substrate when its host changes shells. Thus, significant behavioral or morphological adaptations often evolved in these symbiotic animals to continue their relationships.

In recent years, our research team reported on the distinctive behavior of intertidal hermit crabs and discussed the lifestyle of the symbiotic animals using gastropod shells as a resource. Thus, knowledge of these animals' lifestyles will be shared in this presentation. A core focus of this presentation is to provide knowledge of these organisms to local communities on the Amami Islands in Japan, to improve their appreciation of their biology and aid in conservation efforts of these and other shore-dwelling marine invertebrates.

No.233, 16 October 2023

“Save the Island's Specially Tangerine — Eradication of the Whitespotted Longicorn Beetles, *Anoplophora* spp. by an Entomogenous Fungus, *Beauveria Brongniartii* in Kikaijima Island”

TSUDA Katsuo (Professor Emeritus of Kagoshima University)

[ABSTRACT]

On Kikaijima Island, native citrus species such as *Citrus keraji*, Kikai mandarin orange, and Kunembo *Citrus nobilis*, which are special to Kikaijima, are planted. In addition to these, it is thought that there are also other "island mandarin oranges" whose characteristics have not yet been elucidated.

However, around 2008, damage caused by the whitespotted longicorn beetles, *Anoplophora* spp. began to become noticeable on Kikaijima, and the island was faced with the situation where 10% of the mandarin orange trees withered every year. There were concerns that if the damage caused by the longicornbeetle was left unaddressed, these "island mandarin oranges" would disappear without being noticed.

Therefore, in 2012, Kikai Town and Kagoshima University Entomological Laboratory began a control test using a natural enemy fungus preparation, and in 2015, the scale was expanded to ultra-wide-area application covering the entire island. This time, I will explain the process and the factors that led to its success.

I also introduce findings obtained by breeding individuals reared from larval stage in order to elucidate the actual state of hybridization in the longhorn beetle species group, which is a problem in the Nansei Islands.

No.234, 6 November 2023

“A Case study of Outreach on "Pumice Drift and Stranding" Which Has Become a Social Problem, from the Perspective of Natural Science”

MARUYA Yu (Neco no Wakuwaku Nature School)

[ABSTRACT]

Here we introduce a case study of environmental education outreach on pumice drift and stranding, which has become a social problem in Japan in 2021. Private educational organizations and earth science experts collaborated to create educational materials and courses from the perspective of natural science and environmental education. The mass drift of pumice in the Ryukyu Islands and other regions in October 2021 was a geological event that will remain in many people's memories (Pumice ejected from the Fukutoku-Oka-no-Ba eruption of August 2021).

It is still fresh in our memories that pumices brought from distant undersea volcanoes changed the coastal landscape in just a few days, causing major impacts on marine traffic, fishing, and tourism, and became a serious social problem.

Such pumice drift is a rare phenomenon that occurs only once every few decades in a single area, and this was the first time such a phenomenon had been observed in Japan since the modernization of the country.

While it was a disaster, it was also a valuable opportunity to directly observe the workings of geological nature.

Our organization began creating educational materials and holding lectures immediately after the pumice drifted ashore with the aim of learning about this phenomenon, which was not well known to the general public, from the viewpoints of natural science and environmental education. In collaboration with experts in the field of geoscience, we published a book within a month after drifting ashore and developed educational materials with over 10 contents using pumice as the subject matter. In addition, we will introduce the process of holding more than 80 educational projects in the first year and a half after drifting ashore, including the implementation of projects in cooperation with local schools and municipalities.

No.235, 18 December 2023

“Study about Diversity and Conservation of Bats in the Japanese Archipelago”

MAKI Takahiro (Amami Station, International Center for Island Studies, Kagoshima University)

[ABSTRACT]

In insular regions, historic continental and inter-island connections are considered primary factors in determining the island's current biota. In the Japanese archipelago, there are a number of historic connections to the mainland across several straits (such as the Tsugaru Strait), and biotic distribution tracks these historic connections. Bats, the only mammals with powered flight, are able to disperse across these various straits, and their distribution may thus be less influenced by the physical barriers of the straits than for non-flying animals. However, there are few studies on the influences of historical inter-island and inter-continental connections on bat distribution.

Previous studies indicated that the species composition of non-flying mammals (such as rodents and ungulates) in each region are determined by those originating from the Tokara Strait within the Tokara Archipelago and the Tsugaru Strait between Aomori prefecture and Hokkaido

prefecture. Examining how these barriers affect the distribution of bats compared to the distribution of non-flying mammals provides insight into how flying shapes unique distribution patterns across physical barriers such as straits.

In this presentation, we show the influences of the physical barriers presented by the Tsugaru and Tokara Straits on the distribution of bats. We further outline the study of conservation for bats in Amami Oshima Island (south of the Tokara Straits), which has maintained a high degree of endemism due to its long history of isolation from the Eurasian continent and Kyushu Island.

No.236, 22 January 2024

“Historical Consciousness of Taiwan and Okinawa in Cultural Heritages”

KAMIZURU Hisahiko (Research Organization of Regional Oriented Studies, Prefectural University of Hiroshima)

[ABSTRACT]

Certification of cultural heritage is a major locus for the emergence of historical consciousness and national identity, since certification is influenced by government policy and national sentiment. For example, The Building of Taiwan Sotokufu (the government-general) was classified as a heritage site and is still used as the supreme ruler office of Republic of China, while the one of Chosen Sotokufu was dismantled in 1995.

Presenter classified the current state of Japan’s imperial-era buildings into five concepts. These are ‘externalisation (destruction and neglect of these buildings)’, ‘negative internalisation (these buildings are historical sites and symbols of imperial invasion)’, ‘positive internalisation (these buildings are historical sites and symbols of the legacy of Japanese administration)’, ‘de-Japanisation’ (colonial-era buildings are viewed as stylish examples of beautiful wooden architecture. Their Japanese origins are not of concern to those consuming them), and ‘Becoming tourist destination (where you can experience the Japanese atmosphere)’.

Special Seminar, 10 April 2023

“Well-being Indicators for Malta”

Marie Briguglio (The University of Malta)

[ABSTRACT]

This presentation provides an overview of the state of the art on the science of happiness and wellbeing. It contains a discussion on three key questions on the science of happiness (a) How is wellbeing measured? (b) What stimulates wellbeing? and (c) What does this mean for governments, business and individuals? The presentation then focuses on happiness in the Mediterranean island-state: Malta, sharing the latest information on the state of wellbeing in Malta relative to other countries (in the Mediterranean, in Europe and in the world) and on the challenges relating to quality of life. The presentation concludes by describing initiatives in various countries to pursue wellbeing instead of simply economic growth.

“Climate Change Impacts and Climate-Resilient Pathways in the Mediterranean Region”

Stefano Moncada (The University of Malta)

[ABSTRACT]

This presentation provides a synthesis of the available knowledge about climate change impacts in the Mediterranean region, focusing on coastal areas and islands, and highlights resilient sustainable development pathways, in response to climate change impacts. A third of the Mediterranean population (around 150 million people) lives close to the sea and depends on infrastructure developed in the immediate vicinity of the sea. More than 40% of Mediterranean coastal areas are built-up or otherwise modified, often rendering them particularly vulnerable to coastal flooding and erosion, caused by sea level rise in combination with extreme climatic events. Additional vulnerabilities relate to the infiltration of seawater into coastal aquifers (seawater intrusion) and the general degradation of coastal habitats, whose concentration of human and economic activities is resulting in an increasing degradation of coastal ecosystems. This presentation also reviews available evidence on adaptation efforts specifically related to address emerging issues and concerns in coastal zone management and risk preparedness of various socioeconomic groups to promote equitable and sustainable pathways.

Special Seminar, 19 April 2023

“Under the Spot Light: Islands at the Centres of Our World”

Godfrey Baldacchino (The University of Malta)

[ABSTRACT]

A discipline requires deserves its own journals, its own handbooks, its own associations, its own conferences, its own degree programmes, and its own collection of recommended readings. ‘Island Studies’ now has all of these. It now also has its own ‘how to’ research methods primer, which describes the particular challenges of doing research on (especially small) islands and on/about/for/by/with islanders. One that takes the ‘island as focus’ by the horns and locks in onto ‘the island condition’: islandness. This is an intervening variable which, in and of itself, does not cause anything; but can however contour and nudge behaviours and systems in particular ways and directions. Hence, the dispositions toward economic monopoly, societal intimacy and political totality in small island systems build a distinct “ecology of smallness” which is not typically found in larger, mainland communities.

This presentation offers a snapshot of the evolution of ‘island studies’, soon celebrating the 100th anniversary of anthropologist Margaret Mead’s pathbreaking book *Coming of Age in Samoa* (1928). It particularly traces the movement of islands from dull, mendicant and forgotten peripheries and exotic research objects to central and symbolic players in the Anthropocene and subjects in the international relations of the post-1945 International World Order.

Special Seminar, 27 November 2023

“Incredible Life and Livelihoods of Fishers at Dublar Char Island, Bangladesh”

Md. Sagir Ahmed, Md. Umar Faroque and Sujan Kumar Datta (Department of Zoology, University of Dhaka)

[ABSTRACT]

Bangladesh is a country of about 147,570 km² with a population of over 160 million, and the coastline extends 710 km along the northern edge of the Bay of Bengal. Dublar Char is an island in Bangladesh with an area of 66.5 km², located off the coast of the Sharankhola Range of Sundarbans mangrove forest in Bagerhat District. The island is one of the most important coastal islands, with huge fishery resources and the biggest dry fish processing place. A study was conducted from November 1 to March 31 to know the life and livelihoods of fishers and catch composition during the fishing period in Dublar Char. The population involved in fishing, drying, and other purposes was approximately 25,000 during the fishing period. Livelihood assessment was conducted using questionnaire, semi structured interviews, focus group discussion and key informant interviews. The age group, education, income, living conditions, accommodation, credit systems, etc. were come out from the study. Almost 100% of the population of this island was male as it is taboo to stay any female over there. The catch of set bag net or behundi jal constitutes over 90% of the catch in the island. Annually, Dublar Char supplies dried fish worth USD 15.9 million and live fish worth USD 13.6 million for the country. One of the main problems with set-bag net fishing is that it catches non-targeted undersize fishes which is serious threat for biodiversity loss. Our catch composition data indicated that overfishing and illegal fishing practices are threatening the island's aquatic biodiversity. In the present study, it was observed that people are plagued by problems as they do not have access to any health treatment facilities and an acute crisis of drinking water. There is no hospital and Bank in this island for the fishermen.

Special Seminar, 20 December 2023

“Household Food Insecurity in Remote Upland Villages, Seram Island: A Case in Abio-Ahiolo Village, Western Seram District, Maluku, Indonesia”

Isye Jean Liur (Faculty of Agriculture, Pattimura University, Indonesia)

[ABSTRACT]

Abio-Ahiollo Village is a village located in Elpapatih Sub-district, West Seram Regency. The Abio-Ahiolo community lives in a mountainous or inland area so it is still far from the touch of development and neglected from public services. The road to Abio-Ahiolo Village has not been asphalted so it is not possible to pass by two-wheeled or four-wheeled vehicles, it can only be passed on foot. The journey from Abio-Ahiolo Village to find a paved road can take about 12 hours but sometimes in the rainy season, people use rafts to quickly arrive at their destination. Interviews with Abio-Ahiolo community leaders revealed that this community has a unique social culture and ecological system related to food habits and nutrition. People in Abio-Ahiolo Village

fulfill their daily food needs obtained from farming or gardening, particularly from tubers and corn. Tubers and corn are dried during the dry season, smoked during the rainy seasons, and then cooked or grilled before consumption. In addition, the community rarely consumes fish and broiler chicken meat because the local market location is far from the village. To fulfill the need for animal protein, the community consumes more meat from hunting in the forest by using spears. The results showed that the types of meat consumed were wild boars, birds, deer, cuscus, native chickens, dogs, and snakes. The formation of meat consumption habits is motivated by community beliefs, for example, guests have to be provided with meat and alcohol (sopi), which would be the results of community adaptation to the environment.

Special Seminar, 18 January 2024

“Preliminary Study for Shoreline Vulnerability of Islands in the Tunku Abdul Rahman Park and Turtle Island Park, Sabah”

Farrah Anis Fazliatul Adnan (Faculty of Science and Natural Resources, Universiti Malaysia Sabah)

[ABSTRACT]

The International Panel on Climate Change has acknowledged that small islands are highly vulnerable to the impacts of climate change. Human activities often worsen these impacts, which could undermine the islands' ability to adapt to environmental changes. The study examines the vulnerabilities of two geographically distinct islands' coastlines within the Tunku Abdul Rahman Park (TARP) on the west coast and Turtle Island Park (TIP) on the east coast of Sabah. Manukan Island (TARP) is a continental island, whereas Selingaan Island (TIP) is a reef island. These islands have ecological value and serve as important tourist destinations and turtle nesting areas, thus carrying significant socio-economic implications. This study provides a comprehensive understanding of shoreline vulnerability by including geological and physical environmental factors. The methodology centres around the Coastal Vulnerability Index (CVI), which considers seven key variables: coastal slope, lithology, geomorphology, sea level rise, shoreline change rate, tidal range, and wave height. Instead of treating coastlines as uniform, the research advances a nuanced assessment of vulnerability based on specific sections. This distinction is crucial because the resilience and vulnerability to erosion vary significantly between rocky cliffs and the unconsolidated sands. This allows for developing more targeted conservation strategies that account for the differences in resilience among different sections of the coastline. Each section of the shoreline is assigned a score based on its sensitivity to each variable. These scores provide an overall classification of low, moderate, or high vulnerability zones along the shoreline. Results indicate that the shorelines of Selingaan Island were more vulnerable than those of Manukan Island. This information is crucial in implementing customized management practices for high-risk areas. By highlighting the variations in sensitivity to environmental changes, this research emphasizes the importance of section-specific sustainable strategies in managing island coastlines. It

contributes to academic discussions on island conservation in the face of increasing climate change threats, emphasizing the necessity of responsible stewardship of these ecologically vital and socio-economically significant zones.

Recent Publications

+++ **Kagoshima University Tushoken Booklet** +++

No. 21 REHMAN Hafiz U.: Nature and Geological Characteristics of Koshikishima Islands, Satsumasendai, Kagoshima Prefecture (March 2023)

No. 22 TORII Takashi: The Amami Aarchipelago, Rich in Nature and Culture Resources: Plants and Animals (October 2021)



KagoshimaUniversity Tushoken Booklets No. 21 and No.22

+++ **South Pacific Studies Vol.43, No. 1,2 2023**+++

Research Notes

- YAMAMOTO MASASHI, TANI KANAMI AND KOZAI NAOKO: Local Citrus Grown on Kuroshima Island, Kagoshima Prefecture 1
- RIWASINO John and WILLIAM Kerua: Evaluating Sustainable Agribusiness Farming Practice in Markham Valley of Huon Gulf District, Papua New Guinea (PNG)

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