

DECISION SCIENCE NEWSLETTER

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Monitoring | Beetle
Nickel | Poverty
Muji | EpidemiologyKYUSHU
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EDITOR'S NOTE

This issue focuses on the theme of MONITORING. The Institute of Decision Science for a Sustainable Society (IDS3) program trains graduate students to become global leaders to work toward a sustainable society. The newsletter reports the recent activities of IDS3. This issue, we cover monitoring activities reaching each of the five modules, Environment, Human, Disaster, Health, and Governance.

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FEATURE **Beetles for Sale**

♣ *Andrew Rebeiro-Hargrave*

Eight days a week, IDS3's busy conservationist Dr. Tadatsugu Hosoya enjoys Beetle records. A passion derived from his childhood when he collected Japanese mushi (insects) from oak trees and kept them in cases as pets during the long summer months. Today, Japanese children's hobby for mushi pets continues, albeit for bigger and stronger insects. Dr. Hosoya fades in "with relaxed import restrictions, insect lovers breed foreign stag beetles 'Kuwagata-mushi' and rhinoceros beetles 'Kabuto-mushi' from larvae in large containers. Hosoya praises, "insect breeding is very good opportunity for children to experience nature" and laments, "but they are breeding foreign beetles and not Japanese ones". Many children buy the summer beetle from a pet shop and pay between ¥1,000 to ¥5,000 for their prize Atlas beetles. Wealthier mushi fans, men in their 30 and 40s, are known to invest up to

¥10,000 for a field monster 7.5-centimeter Ookuwagata beetle. Hosoya doesn't want to spoil the party but wishes to return to a sustainable world where children gain experience of collecting and observing insects around their house and show interest in insects living in real nature. Hosoya thinks he's waited too long and takes a walk to look for more beetles.



FIELD TRIP

Nickel and Maple Leaves



♥ Yuki Kubo

Georgian Bay is a large bay of Lake Huron with 30,000 disconnected islands located in Ontario, Canada. It is a good destination for the IDS3 integration team to connect the conservation dots and students to improve their English. The IDS3 visitors toured the bay from Aug 13th to 24th. Following the directions of Dr. Borisenko of University of Guelph, the visitors were on the move for four days. According to English Communication Café roadster diary, the progression was as follows: we started from Guelph and went

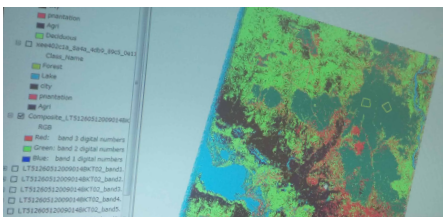
north through Bruce Peninsula and crossed Lake Huron by ferry to Manitoulin Island, and camped at Gordon's Park. We night-hiked and felt close to wildlife and historical culture. Our spiritual feelings were heightened from a Native American descendant. We then visited the "Vale Living With Lakes Centre" of Laurentian University, Sudbury. We learned how nickel-mining activity created serious air and soil pollution in the Sudbury District and Sudbury's environmental revival by lecture of Prof. Gunn. Thanks to persistent efforts of the local government and community, the physical environment recovered. Bravely, the Vale Centre continues to monitor environmental changes. We returned back to Guelph and researchers of University of Guelph and IDS3 faculty presented lectures on topics biodiversity, food, and decision science in a workshop orga-

nized by Dr. Hajibabaei and Dr. Steinke. On the last day, IDS3 students presented their learning related to the tour in the graduate students workshop. Mr. Honda introduced carbon storage technology and Ms. Xu talked about architectural design of Royal Ontario Museum. Ms. Xu described her impression of the trip: "I improved my English skills and recognized I have to keep attempting more and more. The trip reminds me the proverb "better to travel 10,000 miles than to read 10,000 books", and this is very fitting as I embark on my studies abroad experience.



PROJECT

Buzzing above the trees



♥ Brian Kenji Iwana

Monitoring deforestation is an intractable global problem. To bring fresh thinking to the IDS3 bento table, Dr. Ota and Dr. Lee

gave a problem-solving seminar on "Factors Affecting Deforestation, and Forest Monitoring." The seminar covered the following: the definition of a forest; clarifying deforestation; monitoring forests; and mathematical modeling of forests. The seminar discussion highlighted stubborn difficulties of creating and monitoring sustainable forests. It was revealed that lengthy surveys and manual fieldwork are usually conducted to evaluate

the healthy level of a forest and monitor the deforestation process. Consequently, Dr. Ota introduced aerial surveillance by buzzing drones as a modern survey to monitor forests. His drone takes images and captures data from above the forest and remote sensing techniques are used for analysis. We were impressed that Dr. Ota and co-workers are able to quickly monitor large tracts of forest and contribute to measuring deforestation.

FIELD TRIP

Looking through Ume district

♥ Brian Kenji Iwana

Ume district, Oita prefecture is beautiful and provides places for outdoor activities such as hiking, canyoning, and camping. Aligned with the Saiki City, local government, IDS3 participated in a training workshop themed "Town Revitalization" (Machi-Okoshi), July 28 to July 30. The purpose was to analyze the people's perception of Ume District. Accordingly, IDS3 members were divided into study teams: citizen's perspective group, government's perspective group, and outsider's perspective group. The citizen's group addressed "aging", "declining population"

and "the outflow of young people from the area" and focused on what 'the youth enjoy' about Saiki City. The government's group went to Saiki city hall and visited the Ume Promotional Bureau to learn their policies and practices on attracting people to come Saiki. The outsider's group observed the existing attractive areas in the Ume district and created promotional materials including multi-language brochures, Internet site, and a outdoor activities video filmed using by drone. The IDS3 students hope these important activities bring more to international tourists to visit the city.



WORKSHOP | Disaster Prevention— what can we do?



◆ Feifan Xu

Muji translated as “No Brand Quality Goods” shop is distinguished by its design minimalism,

emphasis on recycling, avoidance of waste in production and packaging is a perfect venue for a Science Café. IDS3 students participated in a “Simple and Quick Disaster Preparation that we can do now” workshop at MUJI store at Canal City, Hakata, Japan on August 28th. Earthquake specialist Dr. Sugimoto gave a lecture about “Disaster Prevention” and showed audience photos from real disaster situations. She shared detailed pictures that audience can never even imagine. She explained hazard maps are not created by specialists consider-

ing the worst situation, but by individual specialists using GIS calculation and simulation. After the lecture, the participants were asked to by teacher Kimihiko Hykumura to find the things that seemed useful if a disaster occurred inside the MUJI shop. It was interesting that everyone selected totally different emergency items such as soap paper, bath towel, warp, and cloth wrapper. We reflected that for each person “useful” has different meaning and we had better prepare ourselves in case of an earthquake.

PROJECT | Social business addressing child poverty



◆ Yirong Zhao

Child poverty is an obscure problem masked within an affluent Japanese society. IDS3 members visited the issue via two social business workshops. The social business purpose was to establish sustainable cooperation between NPO, private sector actor, and public university, and achieve a common goal “Reduce Child Poverty in Japan.” Building upon

the working example of active partnership between local NPO, private organization, and university; to donate food and volunteers and help disadvantage children - IDS3 research detectives visited “Onojo Child Care Center Fukuoka” children’s dining room on August 6th. Ms. Otani, the NPO representative guided the team around the center. The IDS3 visitors were impressed by a special space set aside for the children to relax and learn. In a follow-up workshop, on August 20th, bento guru Dr. Hiramastu encouraged IDS3 students to cook their own food (Jisui in Japanese) and teach children learn to cook as a pedagogical tool. “Give a man a fish, and you feed him for a day. Teach a man to fish,

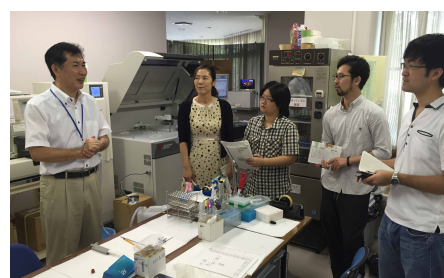
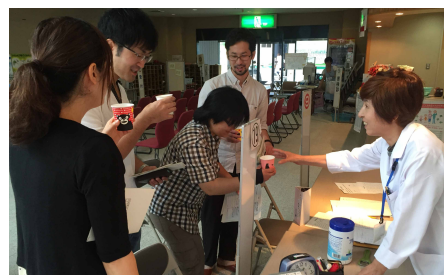
and you feed him for a lifetime”, demonstrates the value of this project.



SEMINAR | An epidemiological contract

◆ Jecinta Kamau

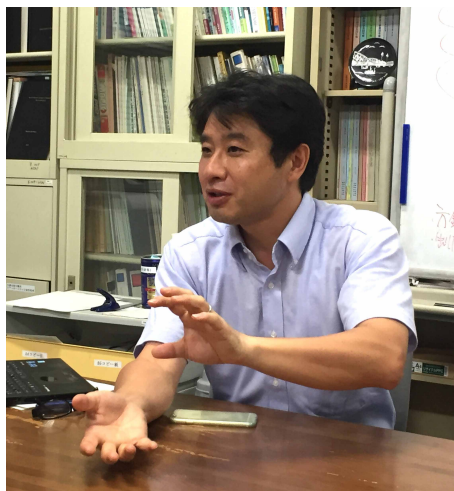
The Health Monitoring Centre in Hisayama, Japan is an important field activity for the Health Module. This year, IDS3 students - Sudo, Sung, Okayama and Takahashi - and staff - Dr. Nishikitani, Dr. Kikuchi and Dr. Yokota - attended an event at the C & C Center on 22nd August. The study purpose was to examine the epidemiological record of Hisayama cohort (town residents) who engages in comprehensive medical check-ups. IDS3 students observed the entire check-up process and experienced some of the tests themselves including blood sugar check-up with 75



grams glucose soda experience, body fat versus muscle weight check as well as BMI (Body Mass Index) measurement, dental examination of tongue bacteria and breath test, and glaucoma eye test. In the afternoon, IDS3 members attended regular Hisayama C&C center doctor’s meeting. They discussed reports on research on “Association of sense of humor and mortality rate” in relation to how happiness relates to health, and ‘Relation between grip and dementia’. IDS3 members bowed and thanked medical doctors, staff and residents. The field activity was concluded with a view of continued cooperation.

INTERVIEW

Assoc. Prof. Kimihiko Hyakumura

Environmental Monitoring,
decision-making and changes

♠ Qirui Yao & Haotian Sun

Dr. Kimihiko Hyakumura is an Associate Professor in Institute of Tropical Agriculture, Kyushu University and leader of Environment Module in IDS3. He is a specialist in Foreign Forest Policy and Foreign Sociology in tropical regions in Laos and Cambodia. His research interests lies in forest management, the involvement of local people in the utilization and protection of forest resources.

Q: Dr. Hyakumura, how does your field research relate to "monitoring"?

A: Regional forest condition in Southeast Asia is changing year by year. Fifteen years ago, I visited a village near the protected area in Laos, that was covered with forest, without electricity, clean water or sanitary facilities, and villagers relied on forest resources. Recently, I returned to visit the same village, the living condition had dramatically changed: everything I saw had become developed, house, electric and road conditions. However, the forest condition had declined prominently—

it was deforested. There is a relationship between human condition and forest condition. My interest is to monitor the change in forest condition and investigate how this change is related to the change of socio-economic status in the village by conducting field research. During my research, I interview more than three persons to double-check whether their statements verify each other.

Q: How does leadership contribute to or influence group decision-making process?

A: Generally speaking, we have two types of decision process: a top-down process and bottom-up process. I think the choice of decision-making process in a group depends on the kind of leadership is implemented. If the leader is pro-democratic, he might choose the bottom-up process through which he gathers information in a multi-leveled manner and then makes a final decision. However, if the leader is inclined to dictatorship, then a top-down process will be frequently used, where the leader makes the final decision and the pass down the goals to achieve. Here, at IDS3, the decision-making process is rather flexible. Every member is recognized as a decision maker. We employ both two processes but usually follow the bottom-up approach because the problems we encounter are rather complex, which requires me as a leader to listen to advice from other members before I make a final decision.

Q: Environment Module is changing over time. What kind of changes took place?

A: IDS3 was established three years ago. During these years, the most significant change I have witnessed is the increase of

field trip destinations. At the very beginning, we only did field study in Yaku Island and made our first attempt to "open up" the first international destination-Cambodia. Followed by the corporation with APP (Asia Pulp & Paper Co.), Indonesia's plantation issues became our second global reach. In addition, Laos is becoming another field trip destination as our global network. And the change of destination goes with the turnover of staffs and students since different research groups have different aspects of interests and research plans, and the choice of destination is adjusted to these changes.

At the end of the interview, Dr. Hyakumura talked about his experience in Southeast Asia countries as a backpacker. When he was an undergraduate student in 1989 and 1990, he visited several Southeast Asia countries, China and Korea. At that time, Laos, Cambodia and Vietnam were closed countries. As an open-testing visit, Dr. Hyakumura and other visitors got the tourist visa for these countries. After the master course, he worked in Thailand as a member of JOCV (Japan Overseas Cooperation Volunteers) from 1994 to 1995, and in Laos as a JICA (Japan International Cooperation Agency) expert from 1996 to 1998. During these periods, he learned Thai language and Lao language.



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* Editor leader of this issue

UPCOMING EVENTS

- Sep. 13-17, Tsushima, Japan, **Survey on sustainable local community building, Governance module.**
- Sep. 21, Yame, Japan, **Survey on sustainable local community building, Governance module.**
- Sep. 21-30, Finland & Russia, **Finland Training Program 2016, Human Module.**
- Sep. 26-29, Korea, **Survey on sustainable local community building, Governance module.**
- Oct. 8-15, Indonesia, **Field trip on disaster area, Disaster module**
- Oct. 10-16, Indonesia, **Visiting palm oil facilities, Human Module.**

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