CURRENT: THE JOURNAL OF MARINE EDUCATION

Self-Awareness at International Pacific Marine Educators Conference 2014 Japan

Abstract

The International Pacific Marine Educators Network Conference was held in summer 2014 in Tokyo and Iwate Prefecture. At the main conference in Tokyo University of Marine Science and Technology, attended by 128 people including 20 marine educators from 8 countries. The conference focused on four themes which concerned the possibilities for reconstruction after the tsunami; and included discussions on the contributions of marine education. After the main conference, we went to Iwate prefecture to meet with local people living in highest peak of mountain, river side, and coastal area of the devastated area. We intend to further strengthen the international network of marine education and to contribute to the sustainable utilization and conservation of global environments.

After four successful conferences held throughout the Pacific Rim: Hawaii (2007), Australia (2008), Fiji (2010), and Chile (2012), the fifth International Pacific Marine Educators Network conference was held in Tokyo and Iwate July 11–16, 2014. Twenty marine educators were in attendance, hailing from eight countries, including the United States, Mexico, New Zealand, Australia, Thailand, Indonesia, Belgium, and Sweden. The conference was aimed at the creation of an environment in which all people concerned with Pan-Pacific affairs can take interest in the ocean and the relation between the ocean and human beings through: international marine education networks; deeper recognition and understanding of the ocean; and responsible and creative decisions and actions. The mission of this conference was to keep the ocean in a sound state and to add value to oceans.

The 2014 conference focused on four subjects, while hoping for the earliest possible reconstruction after the Great East Japan Earthquake that occurred on March 11, 2011: (1) How can marine education contribute to the development of the coastal area hit by the natural disaster? (2) What marine education is necessary to prepare for natural disasters in coastal areas? (3) What roles should marine education serve to maintain a good balance between traditional ecological knowledge, science and technology? (4) How should marine education contribute to promoting understanding about diet culture and tradition?

Schedule of International Pacific Marine Educators Conference 2014 Japan is shown in Table 1.

Table 1. The schedule of International Pacific Marine Educators Conference 2014 Japan

10th July, 2014

✓ Conference Registration At Tokyo University Of Marine Science And Technology (TUMSAT)

11th July, 2014

- ✓ Fish Market (Tsukiji)
- ✓ Lecture in Research Vessel of TUMSAT "Shin-Yo Maru"
- ✓ The Ministry of Education, Culture, Sports, Science and Technology
- √ The Edo-Tokyo Museum
- ✓ Sato-Umi Workshop in Shibaura
- ✓ Dinner at Tennozu Isle Restaurant

12th July, 2014

- ✓ Conference Opening in TUMSAT
- ✓ Night Cruising Dinner in Tokyo Bay

13th July, 2014

- Visit Iwate Prefecture by Shinkansen, Greetings from Vise president of IWATE University, and Representative of Iwate prefecture in front of Morioka Station,
- ✓ Lunch menu: Wanko Soba noodle in Azumaya Restaurant
- ✓ Walking and investigating around Nakatsu River with local people at Center of the Morioka city
- Lodge in Hayachine Mountain, cooking rural dishes, fishing at the headwaters, trekking and BBQ with local residents

14th July, 2014

- Lecture: Sanriku Recreation Park, Sanriku Geopark, Digging In Jomon Village at Iwate Prefectural Fisheries (Sui-San) Science Museum,
- Aquatic Marine Environmental Activities: Beach Observation, Kayaking, Fishing, and Yachting at Jodogahama Beach
- ✓ Dinner party with local regidents, watching Kuromori Kagura Dance,

15th July, 2014

- ✓ Sea Food Processing Shop "Tokue Shoh-ten" in Fujiwara Beach
- ✓ Visit Oh-ura branch, Sanriku Yamada Fishery Cooperative in Yamada Town
- ✓ Lunch and Lecture: "Sea Skirt Aquaculture And Fisheries Recreation"
- Visit Mayor of Otsuchi Town, lecture and discussion and visit house property
- Climb the Evacuated Hill
- ✓ Visit natural monument area of Three spined stickle back, and Lecture: "Otsuchi Nature School"
- √ Visit Tokyo University Research Center

✓ Dinner with Local People

16th July, 2014

- Iwate University Sanriku Fisheries Research Center, Kitasato University, Iwate prefectural Suisan Research Center
- ✓ Arrive Tokyo, Closing Party in Ginza Lion

Recognizing these subjects, the International Marine Education Symposium was held on July 12 at the Tokyo University of Marine Science and Technology, with participation by 128 people. After University President, N. Okamoto, presented a welcoming speech, junior high school and high school students from the local Minato-ward and junior high school students from the disaster-stricken area (Iwate Prefecture) reported on education activities related to the Aquatic Marine Environment Education in English (Figure 1). This presentation was highly regarded by overseas marine educators.



Figure 1. Junior high school students reported on education activities related to the Aquatic Marine Environment Education in English.

Following this, Professor J. Kanda of the Tokyo University of Marine Science and Technology introduced research outcomes of the radioactivity monitoring off Fukushima performed onboard

the training ship owned by the university. In the afternoon, a total of 12 research outcomes were introduced by ocean education researchers of each nation for the four focus areas. Professor Mike Spranger, University of Florida, Sea Grant, introduced the examples of Hurricane Katrina and BP oil spill. By raising awareness and continually conducting educational activities with the local public, they may be better prepared when a disaster occurs, reducing damage, and allowing a smoother recovery.

On July 13, we headed to Morioka City, Iwate Prefecture by the Tohoku Shinkansen line, to visit the tsunami-hit area. At Falls Plaza in front of the Morioka station, Mr. A. Chiba, the Science ILC Promotion Manager, Regional Policy Department, Iwate Prefecture, Dr. Y. Nishitani, Vice-president, Iwate University, and S. Ueno, Chairman of the NPO Morioka Nakatsugawa Committee, welcomed us. We enjoyed fishing with decoys for Japanese trout (*Plecoglossus altivelis altivelis*) in the Nakatsu River flowing through the center of the city, to deepen the exchange with local residents (Figure 2).



Figure 2. We enjoyed fishing with decoys for Japanese trout (*Plecoglossus altivelis*) in the Nakatsu River.

Subsequently, we headed by car to Mt. Hayachine, one of 100 famous mountains in Japan. Mt.

Hayachine, the highest peak in the Kitakami mountain system, is a religious object of the fishermen of Sanriku, the coastal area devastated by tsunamis, throughout time. Participants stayed overnight at the Hayachine lodge located at the foot of the mountain.

We received a warm welcome from the staff of the local NPO Kawai Genkisha (Secretariat: Mr. H. Yokomichi) who operate the lodge. We deepened our friendship through cooking rural dishes, fishing at the headwaters, and trekking (Figure 3). At the exchange meeting, we learned that relief supplies were delivered immediately by people around the lodge at the time of the tsunami and that the lodge was used as an evacuation center to care for disaster victims.



Figure 3. We deepened our friendship through cooking rural dishes, fishing at the headwaters, and trekking.

On July 14, at the Iwate Prefectural Fisheries (Sui-San) Museum of Science (Head: Mr. T. Itoh), Mr. K. Yamaguchi, Vice Mayor of Miyako City, and head, Mr. T. Itoh welcomed us. Mr. Y. Sakuraba, Natural conservation staff member of the Ministry of Environment, explained to us the outline of Sanriku Fukko Park. An Iwate prefectural government staff member of the Sanriku Geopark promotion bureau, explained the outline of Sanriku Geopark. Mr. K.

Takahashi, Miyako City education board explained to us the outline of the government-designated Sakiyama shell mounds (Figure 4).



Figure 4. Mr. K. Takahashi, Miyako City education board explained to us the outline of the government-designated Sakiyama shell mounds.

Subsequently, we enjoyed immersion education together with 16 pupils, sixth graders, of Takahama Primary School (Figure 5), through marine experience activities such as yachting, kayaking, and sea fishing, with cooperative efforts by Miyako City education board (Chairman: K. Itoh) and Iwate marine field (Head Director: H. Hashimoto).



Figure 5. We enjoyed immersion education together with 16 pupils, sixth graders, of Takahama Primary School.

In the evening, we visited Jodogahama (national beauty spot) and appreciated traditional arts "Kuromori kagura dance" (Representative: Y. Setsutai), a government-designated important cultural heritage activity, in front of the Jodogahama rest house. The "Yamanokami dance" and "Ebisu dance", which are appropriate to the current subject, were shown (Figure 6). We applauded the swaying dancing, keeping pace with the rhythmic tempo. Participants from foreign countries seemed impressed by the nature of forests, rivers, and seas of Iwate and by the depth of culture and history that have been built by the people living there over these many years.



Figure 6. Traditional arts "Kuromori kagura dance" (Representative: Y. Setsutai), a government-designated important cultural heritage activity were shown.

On July 15, we visited the Oh-ura district, Yamada-cho and observed a sea squirt aquaculture facility, with instruction by Associate Professor S. Kajiwara, Iwate University as the Fisheries reconstruction support (Figure 7). Onboard the vessel, we tasted sea squirts as a special exhibition. Only Japanese and Korean peoples have a habit of eating this delicacy, and foreign researchers tasted it with wonder. Dr. Rick Tinnin of Texas State University ate it with particular relish, saying that "This is a sea taste, delicious." He seemed strongly inspired by Japanese fisheating culture, eating seafood of diverse varieties. Following this, we discussed with local people while licking our lips over Yamada fruits of the sea box-lunch created by Migoto (Representative: Mr. S. Ohsugi) at Oh-ura district guard station (Oh-ura branch, Sanriku Yamada Fishery Cooperative).



Figure 7. We visited the Oh-ura district, Yamada-cho and observed a sea squirt aquaculture facility, with instruction by Associate Professor S. Kajiwara, Iwate University as the Fisheries reconstruction.

In the afternoon, we visited the Otsuchi town office, which is a modification of the former Otsuchi-cho Primary School, and listened to an explanation of post-disaster reconstruction efforts delivered by Otsuchi town Mayor, Mr. Y. Ikarigawa (Figure 8).



Figure 8. We visited the Otsuchi town office, which is a modification of the former Otsuchi-cho Primary School, and listened to an explanation of post-disaster reconstruction efforts delivered by Otsuchi town Mayor, Mr. Y. Ikarigawa (center).

At the Shiroyama gymnasium observation deck, we heard about the actual experiences of the tsunami victims given by T. Goto, Otsuchi-cho Town Assemblyman. We then visited his residence, which was covered beautifully with gravel, and asked about his feelings in the wake of the disaster (Figure 9). He said "Although completely destroyed by the tsunami, I never feel unpleasant with the sea. I wish to live with the sea in this place where I was born and grow with it in the future also." We felt the especially strong forcefulness in his words, living in the coastal area as he does.



Figure 9. We then visited Mr. T. Goto's residence, which was covered beautifully with gravel, and asked about his feelings in the wake of the disaster (left: author, right: Mr. T. Goto).

On July 16, we visited Iwate Fisheries Technology Center, and Iwate University Fisheries Research Center (Head: Professor Y. Miura) which opened in May 2013. At Iwate Fisheries Technology Center (Head: Mr. O. Sakuma), we listened to an explanation related to the recovery of the fisheries industry after the tsunami disaster, and received a lecture on the fluctuation of fisheries resources. At Iwate Fisheries Technology Center, Professor H. Kasai, Kitasato University, delivered a lecture about the results of the joint development with disaster-affected local food manufacturer in which his specialized field was fully used. We asked specially appointed Professor S. Abe, Iwate University, about the mission of the Fisheries Research Center and received an explanation of the importance of the roles to be filled by Iwate University.

After visiting disaster-affected areas in Iwate Prefecture, all participants described that the current conference was a unique experience. Many made such remarks that they will carry around forever their impressions of the 2014 network conference. The reason is the living style of the people living there, who are closely involved with rich natural environments, mountains,

rivers, and seas. They use the blessings bestowed by nature such as forests, rivers, and the sea. People living there have an attitude that emphasizes caring for nature, with amazing local entertainment, local cuisine, and various traditional vocations, as a reflection of their mind. The participant from Australia said that the "Japanese respect nature while living there. They might be regarded as protectors and conservators of nature. Living in the rich natural surroundings means protection of the nature. I have thought all along that the nature is a place of sightseeing and not for living. However, Japan differs greatly. They are nicely using rich natural environments. Japanese features can be found here. I realized again the value of coexisting of the human being with the nature."

This time, we visited the site with the theme of what roles marine education should play to support disaster-affected areas. At the site, we were able to understand that people living side-by-side with nature have an affection with their hometown even if hit by a disaster once in a while. They have passion for loving nature. Based on these observations, we were able to confirm again that as marine educators, promotion of experience activities in the sea and river, and international sharing of this experience might result in promotion of mutual understanding. Now, abnormal climate, earthquakes, and the like occur on a global scale, and damage attributable to typhoon, hurricane, tsunami is seen locally by the people living there. If people living in the world in close association with imminent environments link their hearts together, then global scale disasters might be regarded as a visible thing. In doing so, the recognition and value for hydrosphere environments, including the ocean, are improved and actions to value the earth are nurtured. Marine educators play this role. This is the objective of International Pacific Marine Educators Network Conference. Therefore, we reached the consensus that marine education should be promoted worldwide.

At the places we visited, many people took care of us. The International Pacific Marine Educators Network Conference was closed successfully. Taking this opportunity, we would like to thank all those who have cooperated with us. We intend to strengthen the international network of marine education further, and contribute to the sustainable utilization and conservation of global environments. The next conference will be held in 2016 in Lombok, Indonesia.

Tsuyoshi Sasaki is an Associate professor at Tokyo University of Marine Science and Technology. He has worked in aquatic and marine environmental education and research since 1992, including being a fisheries high school teacher from 1990-2006 in Miyako city in Iwate prefecture where he was born and raised, and was the area devastated on 2011.3.11. He is now an associate professor at TUMSAT since 2006, and co-founder of Hei River College with local people along his hometown river "the Hei river" since 2007. He had encouraged combining communities along the Hei River from the mountain to the ocean to welcome IPMEN delegates since 2011. After the IPMEN conference, he had a new challenge to establish the "Mountain, River, and Ocean MANABI Network System," to enhance watershed community resilience in the area. In Japanese, "MANABI" means Learning. He has also investigated cleaning up Tokyo Bay around TUMSAT with university and junior high school students. Through these aquatic marine environmental education engagements, he has clarified the importance of cooperative communication while these participants learn intrinsically standardizing Self Determination Theory.