

# current

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“... to make known the world of water, both fresh and salt.”

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Northwest Aquatic and Marine  
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email: [jessica.kastler@usm.edu](mailto:jessica.kastler@usm.edu)

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South Carolina Marine Educators  
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#### Lauren Rader

Southeastern New England Marine  
Educators (SENEME)  
email: [lrader@oceanology.org](mailto:lrader@oceanology.org)

#### Judith Coats

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#### Becky J. Cox, Ed.D.

Tennessee Educators of Aquatic and  
Marine Science (TEAMS)  
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#### Marolyn Smith

Texas Marine Educators  
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# current

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THE JOURNAL OF MARINE EDUCATION

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**CURRENT LOG** – We're excited to bring you another general issue of Current featuring articles by members all over the country and overseas. This issue offers a variety of engaging articles and activities, from teachers in the Chesapeake Bay that are bringing integrated and systemic educational experiences into classroom curriculum, to an overview of the International Pacific Marine Educators Conference held in Japan in 2014 and how this international network of marine educators are contributing to the sustainable utilization and conservation of global environments; as well as many other exciting topics that provide new ways to discover "the world of water."

We publish four digital issues of the journal each year, so please continue to send in your original manuscripts on research, lessons, resources, or strategies focused on marine education, including science, art, literature, and maritime history. For contributor guidelines, please visit our website at <http://www.marine-ed.org/> and scroll down to Current: The Journal of Marine Education and click on "Learn More." The deadline for the October issue is August 3, 2015 and for the December issue is September 15, 2015.

Later this month, NMEA is gearing up for our 2015 annual conference hosted by the Southeastern New England Maine Educators (SENEME), June 29 through July 2, in Newport, Rhode Island. The theme is Ocean State, Ocean Planet: Exploring Our World of Water. The conference hosts general and concurrent sessions, workshops, field trips, and evening events, including a visit to the Mystic Aquarium, field trips to the Rose Island lighthouse, whale watching in the port of Gaililee, and kayaking along the Rhode Island coast, and more. For details about the conference, visit the NMEA website at [www.marine-ed.org/](http://www.marine-ed.org/). To stay connected with the NMEA and be part of the conference from afar, like us on Facebook at [www.facebook.com/NatlMarineEd](http://www.facebook.com/NatlMarineEd) and follow us on Twitter at [www.twitter.com/NatlMarineEd](http://www.twitter.com/NatlMarineEd) for the latest news and updates.

Cheers and hope to see you in Newport this summer!

Lisa M. Tooker, Nora L. Deans  
Editors

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# Self-Awareness at International Pacific Marine Educators Conference 2014 Japan

BY TSUYOSHI SASAKI

## ABSTRACT

The International Pacific Marine Educators Network Conference (IPMENC) was held in the summer of 2014 in Tokyo and Iwate Prefecture. The main conference was held at Tokyo University of Marine Science and Technology (TUMSAT), with 128 attendees, including 20 marine educators from eight countries. The conference focused on four themes centering on reconstruction scenarios after the tsunami, including discussions about the contributions marine education played in the recovery efforts. After the main conference, attendees travelled to Iwate Prefecture to meet with local people living in the peaks of the highest mountains, along riversides, and near the coastal areas of the devastated region. The conference supported the need for the IPMENC, an international network of marine educators, to continue educating and contributing 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 IPMENC was held in Tokyo and Iwate on 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's main objective was to create an environment in which those concerned about Pan-Pacific affairs could help others develop a better understanding of the interconnectedness between the ocean and human beings through establishing international marine education networks; a deeper recognition and understanding of the ocean; and encouraging responsible and creative decisions and actions. The mission of the conference was to preserve and protect the ocean, as well as increase awareness.

The 2014 conference focused on four main topics: 1) how can marine education contribute to the development of coastal areas hit by natural disasters; 2) what types of marine education should be shared to help others prepare for natural disasters in coastal areas; 3) what role should marine education play in maintaining a good balance between traditional ecological knowledge, science, and technology; and 4) how should marine education contribute to promoting an understanding about diet, culture, and tradition? (The schedule of the IPMENC is shown in Table 1 on page 13.)



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

Recognizing the importance and need for discussing the four main topics from the conference led to the International Marine Education Symposium at TUMSAT on July 12, 2014, with 128 people participating. After University President, Dr. Okamoto presented a welcome 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 (see Figure 1).

Following the welcome speech, Professor Kanda of TUMSAT introduced research outcomes of the radioactivity monitoring off Fukushima. His research was conducted onboard the training ship owned by the university. In the afternoon, 12 research outcomes in response to the four focus areas were introduced by ocean education researchers from each nation. Professor Mike Spranger from the University of Florida, Sea Grant introduced the examples of Hurricane Katrina and the BP oil spill. Mr. Spranger discussed the efforts made in raising awareness and conducting ongoing educational activities in local communities to increase preparedness in the case of future natural disasters, potentially reducing damage and encouraging smoother recovery periods.

*Continued on page 14...*

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

July 10, 2014	
✓	Conference Registration at Tokyo University of Marine Science and Technology (TUMSAT)
July 11, 2014	
✓	Fish Market (Tsukiji)
✓	Lecture on the TUMSAT Shin-Yo Maru Research Vessel
✓	Ministry of Education, Culture, Sports, Science and Technology
✓	The Edo-Tokyo Museum
✓	Sato-Umi Workshop in Shibaura
✓	Dinner at Tennozu Isle Restaurant
July 12, 2014	
✓	Conference Opening in TUMSAT
✓	Night Cruise Dinner in Tokyo Bay
July 13, 2014	
✓	Visit Iwate Prefecture by Shinkansen, Greetings from Vice-president of Iwate University, and Representative of Iwate Prefecture at Morioka Station
✓	Lunch Menu: Wanko Soba Noodle in Azumaya Restaurant
✓	Visit Morioka City (walking tour and meeting with local residents of the Nakatsu River region)
✓	Lodge on Hayachine Mountain (prepare rural dishes, fish at the headwaters, trekking, and barbecue with local residents)
July 14, 2014	
✓	Lecture: Sanriku Recreation Park, Sanriku Geopark, Digging in Jomon Sakiyama 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 Residents and Performance of Kuromori Kagura Dance
July 15, 2014	
✓	Seafood Processing Shop "Tokue Shoh-ten" at Fujiwara Beach
✓	Visit Oh-ura branch, Sanriku Yamada Fishery Cooperative in Yamada Town
✓	Lunch and Lecture: Sea Squirt Aquaculture and Fisheries Recreation
✓	Visit Otsuchi Town Mayor (lecture, discussion, and tour of the residential property)
✓	Climb the Evacuation Hill
✓	Visit the Natural Monument Area of the Three-Spined Stickle Back, and Lecture: Otsuchi Nature School
✓	Visit University Tokyo Research Center
✓	Dinner with Local People
July 16, 2014	
✓	Visit Iwate University Sanriku Fisheries Research Center, Kitasato University, Iwate Prefectural Fisheries Research Center
✓	Arrive in Tokyo, Closing Party at Ginza Lion



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

On July 13, we travelled to Morioka City, Iwate Prefecture on the Tohoku Shinkansen line to visit the tsunami-hit area. At Falls Plaza, in front of Morioka station, Iwate Prefecture, Dr. Nishitani, Vice-President of Iwate University; Mr. Chiba, the Science ILC Promotion Manager of the Regional Policy Department; and Mr. 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. The river flows through the center of the city. The experiences and conversations led to more in-depth exchanges between local residents and conference attendees (see Figure 2).

We then continued on by car to Mount Hayachine, one of 100 well-known mountains in Japan. Mount Hayachine, the highest peak in the Kitakami mountain range, is a religious site among the fishermen of Sanriku. The coastal area in this mountainous region has been devastated by tsunamis over the years. Conference 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. Yokomichi) who operate the lodge. We deepened our friendship through cooking rural dishes, fishing at the headwaters, and trekking (see Figure 3). At the exchange meeting, we learned that relief supplies were delivered quickly by people around the lodge at the time of the tsunami. The lodge was used as an evacuation center to care for the victims.

On July 14, at the Iwate Prefectural Fisheries (Sui-San) Museum of Science (Head: Mr. Itoh); Mr. Yamaguchi, Vice Mayor of Miyako City; and head, Mr. Itoh welcomed us. Mr. Sakuraba, Natural conservation staff member of the Ministry of Environment, discussed the geography of Sanriku Fukko Park. Mr. Shimomukai, an Iwate prefectural government staff member of the Sanriku Geopark promotion bureau, explained the geography of Sanriku Geopark. Mr. Takahashi, Miyako City education board member, shared the importance of the government-designated Sakiyama shell mounds (see Figure 4).



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



Figure 4. Mr. Takahashi from the Miyako City education board explained to us the outline of the government-designated Sakiyama shell mounds. Courtesy of Tsuyoshi Sasaki



Figure 5. We enjoyed immersion education together with 16 sixth graders from Takahama Primary School. Courtesy of Tsuyoshi Nieda Eduardo

Our group of 16 sixth graders from the Takahama Primary School were immersed (see Figure 5) in the experience through participating in marine education activities, including yachting, kayaking, and sea fishing, in cooperation with the Miyako City education board (Chairman: Itoh) and the Iwate marine field (Head Director: Hashimoto).

In the evening, we visited Jodogahama (known nationally for its beauty) and appreciated the traditional art of “Kuromori kagura dance” (Representative: Y. Settai), a government-designated cultural heritage activity, in front of the Jodogahama rest house. The “Yamanokami dance” and “Ebisu dance” are shown in Figure 6. We applauded the swaying dancing and kept pace with the rhythmic tempo. Participants from the foreign countries were impressed by the beauty of the forests, rivers, and seas of Iwate and by the rich culture and history surrounding the people living in these areas.



Figure 6. Traditional art of “Kuromori kagura dance” (Representative: Setsutai) is a government-designated cultural heritage activity. Courtesy of Tsuyoshi Sasaki

On July 15, we visited the Oh-ura district, Yamada-cho, and observed a sea squirt aquaculture facility. Associate Professor Kajiwara from the Iwate University spoke to us about fisheries reconstruction support (see Figure 7). Onboard a vessel, we tasted sea squirts that were part of a special exhibition. In the Japanese and Korean cultures, sea squirts are a delicacy—the foreign researchers tasted this delicacy with wonder. Dr. Rick Tinnin of Texas State University enjoyed the sea squirts with particular relish, and said, “This is a sea taste, delicious.” Dr. Tinnin was very inspired by our Japanese fish-eating culture and enjoyed eating the diverse seafood offered in Japan. We then continued our discussions with local people, while eating delicious foods from the sea created by Migoto (Representative: Mr. 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. Courtesy of Tsuyoshi Sasaki

In the afternoon, we visited the Otsuchi town office, which was the former Otsuchi-cho Primary School. We listened to Otsuchi town Mayor Ikarigawa deliver a speech about the post-disaster reconstruction efforts (see Figure 8).



Figure 8. We visited the Otsuchi town office, and listened to Otsuchi town Mayor Ikarigawa (center) give a speech on post-disaster reconstruction efforts. Courtesy of Tsuyoshi Nieda Eduardo

At the Shiroyama gymnasium observation deck, we listened to Town Assemblyman, Mr. Goto of Otsuchi-cho discuss the experiences of tsunami victims. We then visited his residence, and asked him about his thoughts in the wake of the disaster (see 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 determination and strength in his words along with his resolve to continue living in a coastal area.



Figure 9. We visited Mr. Goto's residence (left: author and right: Mr. Goto). Courtesy of Tsuyoshi Nieda Eduardo

On July 16, we visited Iwate Fisheries Technology Center, and Iwate University Fisheries Research Center (Head: Professor Miura). The center opened in May of 2013. At Iwate Fisheries Technology Center (Head: Mr. Sakuma), we listened to a discussion on 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 Kasai of Kitasato University delivered a lecture on the results of a joint development with disaster-affected local food manufacturers. We asked appointed Professor Abe of Iwate University about the mission of the Fisheries Research Center. Professor Abe discussed the important role that Iwate University will play in the recovery efforts.

After visiting disaster-affected areas in Iwate Prefecture, participants said that the conference offered a unique perspective. Many shared that they will carry their memories of the 2014 conference with them forever. The participants saw firsthand how closely connected the people are to their rich natural environments. The local people have a deep appreciation for nature and care about their forests, rivers, and sea. This attitude is reflected in local cuisine and traditional vocations. The participant from Australia said, "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 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 human beings coexisting with nature."

We then concluded with the overarching theme of what role should marine education play in supporting disaster-affected areas like those found in Japan. At the disaster site, we were able to meet the people living in these areas and see their dedication to taking care of their land and environment despite suffering through natural disasters. The Japanese people have a passion and love for nature. Based on these observations, we were able to confirm once again that as marine educators we need to support education about the sea and river; and through sharing experiences, we can encourage a mutual understanding that helps all of us. For example, climate change, earthquakes, typhoons, hurricanes, tsunamis, etc., are experienced by people living in those affected areas around the globe. Our environments are closely linked, and we need to come together as a people to recognize the importance of protecting our ocean and taking care of our Earth. Marine educators play an important role in sharing their knowledge with others. This is the objective of the International Pacific Marine Educators Network Conference. Therefore, we reached the consensus that marine education should be promoted worldwide. We intend to strengthen the international network of marine education further, and contribute to the sustainable utilization and conservation of global environments. The 2016 conference will be held in Lombok, Indonesia.

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**TSUYOSHI SASAKI** is an Associate Professor at Tokyo University of Marine Science and Technology (TUMSAT). He has worked in aquatic and marine environmental education and research since 1992. He was a fisheries high school teacher from 1990 to 2006 in Miyako City in Iwate Prefecture, where he was born and raised (and was the area devastated on March 3, 2011). He has been an Associate Professor at TUMSAT and co-founder of Hei River College with local people along his hometown river "the Hei river" since 2007. He 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 shares the importance of cooperative communication, while also teaching participants about intrinsically standardizing Self Determination Theory.



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c/o Jeannette Connors

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