



Spoonbills Speak

echoes across the Pacific



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The Official Newsletter of SAVE (Spoonbill Action Voluntary Echo) International

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LA 205 STUDENTS COME THROUGH AGAIN

From February 24 through March 19, six students in U.C. Berkeley's LA 205 studio worked with SAVE to launch research on Road 1-4, proposed to run through Jiading Wetland. They tackled the work systematically, looking at habitat requirements for the Black-faced Spoonbill and other species of concern found in the wetlands, conducting a review of relevant planning and environmental policy documents, critically evaluating the environmental impact assessments conducted for the road, finding case study examples of highway impacts on habitat, and determining the area's potential for ecotourism. Marcia McNally, Randy Hester, Barbara Butler, Jan Eiesland, Kirsten Podolak, Kelly Janes, and Derek Schubert from SAVE worked with the students throughout – sometimes in studio, sometimes from Taiwan via Skype. The students also made a proposal for new facilities to enhance the tourist experience of the wetlands, nearby harbor, and surrounding villages. The team; Emily Alvarez, Stephanie Brucart, Allison Jacobson, Yang Ju, Saori Ogura, and Serin Park; along with GSI Jen Natali and Professor John Radke, made a significant contribution to this issue. Their work is being combined with SAVE's work during the Taiwan trip to produce a report for the EIA Committee that will make the final decision about Road 1-4.

-BY ALLISON JACOBSON, MARCIA MCNALLY, SAORI OGURA



U.C. Berkeley Students and Reviewers at the LA 205 Final Presentation
Photo Credit: Jen Natali



Derek Schubert and Randy Hester at the Press Conference on Jiading Wetland
Photo Credit: Fiona Cundy

SAVE CONCLUDES NOTEWORTHY TRIP TO TAIWAN

A small flock of SAVE members undertook a long migration in March, on a ten-day trip to Taiwan that included presentations at the 9th Conference of the Pacific Rim Community Design Network and first-hand study of wetland habitat suitable for the Black-face Spoonbill. This delegation included Professors Randolph (Randy) Hester and Marcia McNally; SAVE Executive Committee members Tami Church (Director of Online Media), Fiona Cundy (Secretary General), and Derek Schubert (President), Shanna Atherton (Communications Director), Jing Ma (China Liaison), and Kinya Shiraishi (Japan Liaison). As we described in the last issue of *Spoonbills Speak* (Vol. 16, Iss. 1), the conference offered a forum for the students to present their research relating to sea-level rise in southwestern Taiwan, work done in the 2013 studio in environmental planning (LA 205). The conference consisted of two parts: four concurrent three-day workshops in different parts of Taiwan and then a two-day gathering of all participants on the campus of Chung Yuan Christian University (CYCU) in Zhongli. The SAVE delegation attended the workshop on Wetland Conservation, which took place in

the village of Shin-Tsen and included nearly 20 participants from Taiwan, China, Japan, and the United States. SAVE also used the trip as a way to gather habitat information for spoonbills in Taijiang National Park and the imperiled Jiading Wetland. SAVE's high-profile trip across the Pacific even inspired articles in several Taiwanese newspapers; you can find links and translations at SAVE's website. The next Community Design conference is tentatively set for China in 2016.

-BY DEREK SCHUBERT



Shanna Atherton, Kinya Shiraishi and Jing Ma Present in Budai
Photo Credit: Fiona Cundy

PLANNING PROPOSAL FOR TAIWAN'S SOUTHWEST COAST

Three SAVE members presented their paper titled 'Proactive Adaptation to Sea Level Rise, Severe Storms, and Floods: Planning Proposals for Four Sites along Taiwan's Southwestern Coast' at the 9th Pacific Rim Community Design Network Conference in Budai. Their ideas of proactively embracing sea level rise by selectively breaking dikes, establishing a coastal ecological buffer zone, adaptively retreating local communities, and highlighting future economic alternatives were well received by the local environmentalists and scholars to whom they presented. Most of the proposals remained at only a conceptual design level due to the limited data available when the study was conducted, but participants of the conference found the ideas very inspiring and well thought out. The discussions following the paper presentation focused on how to choose the locations for ecological buffer zones and choose the dikes to remove. Once detailed topographic data are available, these issues can be studied further.

-BY JING MA

GUEST PERSPECTIVE

I had the pleasure of joining the SAVE group in Taiwan this March – and what a wonderful experience it was! I came in knowing almost nothing about the Black-faced Spoonbill, and to say I learned a lot is an understatement. As a group, we learned about new feeding grounds, changes to the local wetlands, and recently collected data by locals.

As part of our trip, we visited Jiading Wetland – a valuable Black-faced Spoonbill habitat threatened by a road construction proposal. To understand the challenges facing Jiading Wetland, we worked with the neighboring community through a day of engaging discussions, a mapping activity, and site visits. Throughout the process, we realized the many opportunities within the community – with great benefits for them as well as for the natural ecosystem – in preserving Jiading Wetland. This perspective was related back to the local public through a press conference held by Randy Hester, Derek Schubert, and the SAVE local partners.

Conversations stemming from the paper presentations within the Community Design Network Wetland Conservation Workshop focused on the multiplicity of interconnected issues facing communities at the edge of valuable wetland ecosystems. Presentations included economic and development needs, methods of pairing technical approaches to floodgate control with local management, and conversion of historic salt flats. We also learned about Shin-Tsen Elementary School's unique approach to integrating scientific research into their curriculum.

Given my background in land use and development in coastal communities on the edge of threatened wetlands, it was great to see all these issues coming together with local interests - as well as global concerns for the Black-faced Spoonbills.

-BY KATRINA DURBAK
(LOUISIANA STATE UNIVERSITY)



SAVE International and Colleagues at the Pacific Rim Conference
Photo Credit: Marcia McNally

“BLACK-FACED SPOONBILL FRIENDLY” PRODUCTS

Black-faced Spoonbills rely on several types of habitat throughout the coast of Taiwan, including foraging habitat in nearby fish ponds. Milkfish (*Chanos chanos*) aquaculture is a rich part of the traditional heritage and the customary fish raised in the majority of these fish ponds. Because milkfish require only six months of rearing, there is a six month window after harvesting when the ponds can be used by spoonbills who feed on small fish and shrimp leftover after ponds are drawn down.

Interest has recently shifted towards raising King Grouper (*Epinephelus lanceolatus*) which fetches a higher price at market. Unlike milkfish, sea grouper is reared year-round and in much deeper water, making it unsuitable for spoonbills to forage in. Furthermore, local experts deem the milkfish diet of algae to be more sustainable than the sea grouper's, which is carnivorous.

In an effort to preserve both traditional heritage and habitat for Black-faced Spoonbills, the Taijiang National Park developed a new program, encouraging fish farmers to cultivate milkfish rather than sea grouper. The program operates similarly to Northern California's "Fish Friendly Farming" program. The "Black-faced Spoonbill-Friendly Fish Farm" program in Taiwan provides an incentive-based method to encourage aquaculture practices that protect habitat for the Black-faced Spoonbill. Products from certified fish ponds are sold at a modest mark-up to benefit the local fisherman. The "Black-faced Spoonbill-Friendly Fish Farm" certification assures the consumer that the fish produced by these participating farms are from a "Black-faced Spoonbill-Friendly" fish pond with traditional milkfish and shallow salt water.

It's a win-win for the farmers and the spoonbills!

-BY TAMI CHURCH



Value-added Milkfish Products at Taijiang National Park
Photo Credit: Fiona Cundy



Shin-Tsen Student Leaders Introducing the Ecological History of Budai
Photo Credit: Fiona Cundy

SPOTLIGHT: SHIN-TSEN ELEMENTARY SCHOOL, TAIWAN

As we turned the corner to Shin-Tsen Elementary School, we were immediately greeted by a traditional drum line of students and a sign that read: "Welcome—We are Happy" with two student spoonbills opening their wings to take us in. We moved through the entranceway, past two floor-to-ceiling murals of children laughing and watching spoonbills through telescopes, and into a courtyard where two students leaders gave us an introduction to the history and ecology of the horseshoe crab. A class of students showed us their handmade telescopes, taught us how to use them, and they helped us locate spoonbills in the nearby ponds. We didn't spot any spoonbills, but we came away amazed at the transformation this school has undergone in just four short years.

SAVE first experienced Shin-Tsen Elementary School in 2012, when we spearheaded the Sister School Project between Shin-Tsen Elementary and Grass Valley Charter School in Northern California. The Taiwanese school supports a small population of 62 students and 14 educators and has been under threat of closure from the national government since 2010. Then-new principal Chang Chih-Lang balked at the thought and immediately set out to create a curriculum so unique and effective that the government would be unable to justify the closure. The result is an education program that is inspiring the next generation of environmental stewards and spoonbill activists in Taiwan. From Art and Literature to Science and Math, spoonbills—and since 2013, their friends the horseshoe crabs—have been at the heart of students' daily lives. Students write poems about spoonbills during their Literature course and use their hand-built telescopes to perform bird counts out of their classroom windows from October to March in their Science classroom. Students have developed a database of four years' worth of data

that is advancing scientific knowledge about spoonbills for themselves and the world.

Students have also built a horseshoe crab habitat within the school that is part of an effort to re-establish a local population of this endangered species. As they raise the crabs in a series of tanks, the students learn about their lifecycle, releasing them once the crabs have reached maturity.

While Principal Chang's efforts have worked thus far in delaying the school's shutdown, its future, like that of the spoonbill and the horseshoe crab, is anything but certain. In March, the international Pacific Rim Community Design Network—of which SAVE is a member—passed a resolution in support of Shin-Tsen Elementary School and its groundbreaking environmental education curriculum.

-BY SHANNA ATHERTON



SAVE International and Colleagues After the 4 x 400 Meter Relay
Photo Credit: Marcia McNally

COMMUNITY DESIGNERS TAKE TURN AS TRACK ATHLETES

In March, SAVE International members attending the Pacific Rim Community Design Network conference laced up their shoes to participate in the annual CYCU Sports Day. The event is an ongoing university tradition involving faculty, staff and students. SAVE International and our colleagues at CYCU formed three competitive teams to place 3rd, 4th, and 6th out of 12 teams in the 4 x 400 meter relay. The team placing third received medals: Hua-sun Chang (Director of Landscape Architecture Department at CYCU), Rung-Jiun Chou (Professor of Landscape Architecture at CYCU), Professor Yves Michelin (VetAgro Sup Campus Agronomique de Clermont) and anchor leg Derek Schubert (SAVE International President). The team secured its spot on the podium with a speedy last lap by former high school and collegiate middle-distance runner, Derek Schubert.

-BY FIONA CUNDY

SAVE STARTS A NEW JAPAN CHAPTER

We are excited to announce the start of the SAVE International Japan Chapter! The new chapter is an expansion of SAVE Fukuoka and includes students and faculty from Professor Masato Dohi's Community Design Laboratory at Tokyo Institute of Technology, Professor Hisashi Shibata (Landscape Architecture and Community Design Laboratory at Fukuoka University), and local wild bird specialist Satoru Matsumoto (Wetland Forum).

Shibata and Matsumoto in recent months have strategized efforts regarding the wild bird park project at Fukuoka Island City. But the national Ministry of Land, Infrastructure, Transport and Tourism (MLIT) recently reorganized the special committee in charge of the plan for Island City's wild bird park, setting back the planning process by many months but providing a new opportunity for SAVE to guide the final plan.

From April 24th through 25th, Professor Masato Dohi, three of his students, and his assistant visited Fukuoka and observed three Black-faced Spoonbills and a variety of wild birds at Waijiro Tidal Flat. The group will plan activities with local groups to raise awareness about protection of the habitat of Black-faced Spoonbills and other wild birds at the tidal flat.

-BY KINYA SHIRAISHI



Artificial Nesting Island in Songdo, South Korea
Photo Credit: birdskoreablog.org

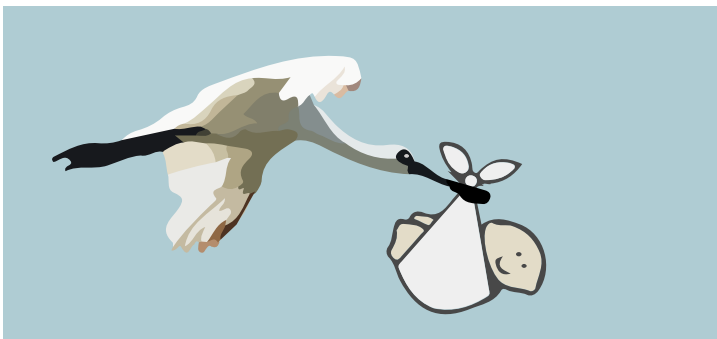
UPDATES ON KOREA

A small artificial island (only 92 feet in diameter and 820 feet from the edge of the polluted stormwater pond where it is located) in Songdo, South Korea recently has become one of the most densely populated breeding habitats for the endangered Black-faced Spoonbill. According to the Incheon Black-faced Spoonbill Network (a local monitoring group), the spoonbill population here has skyrocketed since 2009 to the highest population on record. The dramatic increase from 72 spoonbills (recorded July 24, 2009) to 243 (recorded

June 29, 2013) accounts for nearly 10% of worldwide Black-faced Spoonbill population. Debunking the conventional understanding that spoonbills breed in only remote areas, the birds have been frequently observed here, using the island as a nesting site. Six juveniles hatched from four nests in 2009 and 119 juveniles from 61 nests in 2013. The local group has been carefully monitoring and providing the nest materials for the spoonbills upon their arrival in the early spring.

In spite of this good news about the increase in nests, there are challenges from the local to regional scale. Due to the continued filling of the last remaining tidal flat, the spatial foraging pattern of spoonbills has drastically changed. In order to avoid the construction sites, spoonbills use their previous foraging site (the now-filled tidal flat area) for loafing and fly even farther for foraging purposes. Additionally, the pollution of the industrial pond is of great concern. In April 2013, a spoonbill was found dead due to aspergillosis, a fungal respiratory disease. The local monitoring group suspects that the death was due to the pollution of the pond and may also be the cause of 20 juvenile deaths in 2013 that were born but died shortly after. In early spring of 2014, the local group faced unexpected challenges in trying to provide nesting materials to the birds—due to the outbreak of Highly Pathogenic Avian Influenza (HPAI) over the winter, the public access to wild birds including spoonbills was prohibited. Lastly, Suha-Ahm (another critical spoonbill habitat in Incheon Bay with 45 nests and 120 spoonbills observed in 2012, 12 miles northwest from the artificial island) is threatened by new construction of Youngjong's 2nd stage dredge dumping site and the "Dream Island" plan. SAVE International is keeping the spoonbills of Songdo on its radar and looking for future actions that can be made.

-BY YEKANG KO



STORK REPORT

We are excited to announce the arrival of two new additions to the SAVE family. Congratulations to Yoonju Kametani (SAVE Executive Committee member) on the birth of her son, Kazushi, and to Wan-Chih Yin (SAVE Executive Committee member) on the birth of her daughter, Isa. Both babies were born in March of 2014.

-BY FIONA CUNDY & MARCIA MCNALLY

A THANKS TO OUR CONTRIBUTORS!

Thank you to everyone who contributed to SAVE International this spring. Between renewing members, a crowd-funding campaign, and a send-off party, Shanna Atherton, Tami Church, Fiona Cundy, Jing Ma, Derek Schubert, and Kinya Shiraishi were able to participate in the 9th annual Conference of the Pacific Rim Community Design Network in March 2014. We are fortunate to have such a strong community of supporters. A special thanks to Patricia Schubert and Lauri Twitchell and Peter Suchecki.

-FIONA CUNDY



SAVE International's Send-off Party in March

Photo Credit: Tami Church



SAVE IS 17!

Dear SAVE Members:

We are off to a productive start this year; our participation in the 9th Conference of the Pacific Rim Community Design Network was a rich and motivating experience. However, our involvement with the protection of Jiading Wetland in southern Taiwan is critical.

Over 90% of Kaohsiung County's spoonbill population winters in the wetland. The numbers have grown quickly in the past few years: peak counts have been 2011: 43, 2012: 56, 2013: 154, 2014: 189 (February peak; the official International Black-faced Spoonbill Census recorded 157).

SAVE members and UC Berkeley students have just completed a draft technical report analyzing the environmental impact review (EIR) process and impact the road would have on the existing habitat if built. As we conducted our research, the evidence suggested that it would also be essential to consider the economic development potential for the Jiading area and especially the costs and benefits to Jiading and nearby Qilou Villages if the entirety of the Jiading Wetland is preserved for wildbird habitat as well as ecological and cultural tourism. This document is being translated into Chinese and given to the EIA Committee that will make the final decision.

SAVE International also continues its involvement in the planning of the Fukuoka wild bird park. We are fortunate to have a core group of local colleagues in Fukuoka advocating for sound science in the park design, a group that is expanding to take advantage of expertise elsewhere in Japan.

We hope you will renew your annual membership to SAVE, or join us if you don't have a membership. Thank you for your support!

_____ I would like to renew my membership for _____ (\$25, 50, \$100, \$250, \$500)

_____ I would like to join SAVE as:

_____ a sponsoring member of SAVE for \$25

_____ a contributor to the spoonbills' nest egg for \$50

_____ an adoptive grandparent of a spoonbill for \$100

_____ an adoptive parent of a spoonbill for \$250

_____ adopter of an entire spoonbill family for \$500

_____ I would like to make a one-time contribution to help publish SAVE's report on Jiading Wetland

Please return to: SAVE International, c/o Earth Island Institute, 2150 Allston Way Suite 460, Berkeley, CA, 94704. Make your check payable to SAVE/EII. You can also donate through the SAVE website: earthisland.org/save/donate.

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