AND, SAVE'S NEWEST MEMBER IS...

Mini-conference where the NSA joined SAVE

At a ceremony in Peimen, Taiwan, on March 24, the Southwest Coast National Scenic Area (NSA) officially became a member of SAVE International. This was a historic event that acknowledged the longstanding cooperation of SAVE and the NSA. The recently appointed director, Michael C.Y. Chang, initiated the membership and directed the ceremony. He spoke about the importance of SAVE in the efforts to create the NSA and about the cooperative research the two groups have undertaken, which has led to the preservation of habitat for the Black-faced Spoonbill (among other species of concern) and to the development of the NSA as a premier destination for ecotourism. The NSA now attracts 3.8 million visitors per year.

The membership ceremony was held in the new museum adjacent to the NSA headquarters and warehouses that once were part of Taiwan Salt. The high-tech, high-touch museum highlights the local culture and ecology, including exhibits on the spoonbill.

The NSA was praised for its precedent-setting work to set aside land for stepping-stone habitats that allow the spoonbills to enlarge their roosting and foraging sites, reduce the risk of catastrophic die-off that could send the birds into an extinction vortex, and increase metapopulations and genetic diversity. Welcome Director Chang and the NSA to SAVE! --- BY RANDY HESTER


New museum at the NSA

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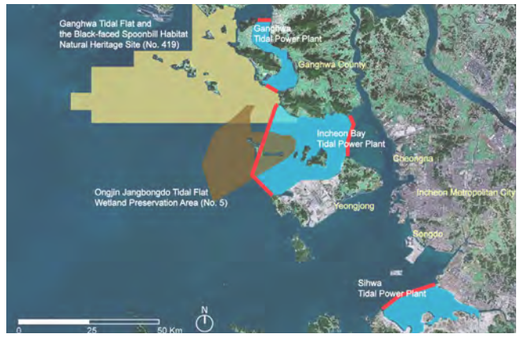
Spoonbills Speak

echoes across the Pacific
A Project of Earth Island Institute
http://saveinternational.org/

THE DIRTY SIDE OF "CLEAN" KOREAN TIDAL POWER



Propsed tidal power plants in Gyeonggi Bay

SAVE is looking critically at the proposals for large-scale tidal power in South Korea, and they do not appear good. South Korea's national government and the Incheon City government have put forth plans to build two tidal power plants (Ganghwa Tidal Power Plant and Incheon Bay Tidal Power Plant), each of which would be larger than the largest plant in the world today, and that plant happens to be just down the coast from them, at Shihwa. Given the strong tides of the Yellow Sea along the western shore of the Korean peninsula, tidal energy could contribute substantially to the country's electrical grid. Furthermore, tidal power would not emit greenhouse gasses, unlike energy from burning coal or natural gas. What sounds like an ideal "clean" energy policy, however, is not so simple. Korea's proposed method for generating power involves walling off large shallow areas and trapping the high tide for an artificially long time before releasing the water through turbines—the "tidal barrage" model. Individually, the two proposed plants could have devastating effects on their ecosystems, and cumulatively with the existing plant at Shihwa, the effects would be unprecedented and catastrophic. Together with the graduate students in environmental planning at UC Berkeley, and our academic and activist colleagues in South Korea, SAVE has identified many drawbacks to the two proposed plants. Black-faced spoonbills are among the species that would suffer because the tidal power plants would destroy their habitat. Fishermen and other people who earn a sustainable living from the sea would also lose out.

Our friends at the Ganghwa Citizens' Committee are calling on organizations and individuals to endorse them as they oppose the government's plans for these mega-scale tidal power plants. SAVE recently wrote a letter of endorsement, citing our discouraging conclusions and suggesting a new look at the true costs and benefits of the proposed plants. Other nations are also finding that tidal power is not a perfect solution to the world's energy crisis; in late 2010, the United Kingdom abandoned its plans for a huge tidal barrage at Severn because the new estimated cost was just too high.

To read more about SAVE's work on tidal power in South Korea, including our letter of endorsement, please visit http://saveinternational.org/saveinaction/tidal-power-in-south-korea. --- BY DEREK SCHUBERT

FROM LA205: STUDENT RESEARCH ON CURRENT HABITAT THREATS

This spring, graduate students of the environmental planning studio at UC Berkeley (LA 205) spent their semester strategizing how to protect critical habitat of the endangered Black-faced Spoonbill. Working in groups, the students researched three areas of concern: "Island City", in Hakata Bay in Japan; proposed tidal power in Gyeonggi Bay, South Korea; and a look into the LEED-ND certification of Songdo City, South Korea. Students collaborated with SAVE members and UC Berkeley alumni.

The Asian Waterbird Census (1987-2007) reflects that there are seven sites off Kyushu, Japan, that support more than one percent of the overall population of Black-faced Spoonbills (a qualification for designation under the Ramsar Convention as a "wetland of international importance"). As part of this wetland habitat network, Hakata Bay serves as a critical habitat link. However, the creation of "Island City" in the bay threatens this network, minimizing bird habitat to an insufficient 12 hectares, impacting the environment of the bay's water quality, and failing to meet the geometries of the BFS habitat requirements. Meanwhile, Island City's existing plan segregates economy, community and environment.

Graduate students Tami Church, Molly Franson, Rachael Marzion, Jessie Olson, Pedro Pinto, and Michael Cook envision an alternative future for "Island City." Co-mingling the urban and natural elements of Hakata Bay, the group recognized opportunity for environmental protection and sustainable economic development. Their alternative design embraces Fukuoka as a regional gateway, yet diversifies itself by rezoning for integrated land use, mixed and residential areas, and ecotourism through the creation of an urban wild bird park on the northeast corner of the island. The design promotes Fukuoka as a vibrant city with a local identity.

The subject of the second group's study, Ganghwa Tidal Flat is the largest remaining tidal mud flat in Korea and vulnerable to "reclamation", pollution, and tidal energy production. It is also home to some 13 globally threatened species of birds, including the Black-faced Spoonbill. To evaluate the impacts of tidal power, students Jeff Farrington, Kelly Janes, Cynthia Rivas, Zan Rubin, and Ricardo Sousa researched international case studies. The group studied the ecological and economical value of tidal flats and performed a cost-benefit analysis of tidal power, comparing it with alternative sources of energy production.

The graduate students also simulated the likely short-term and long-term biological effects of barrages implemented in Gyeonggi Bay. Some effects include increased plant productivity, reduced fish migration, decreased sensitive benthic species diversity and abundance, decreased migratory bird carrying capacity, collapse of the fishing economy, possible food web collapse, and health risks associated with water quality. Large areas of the Gangwha Tidal Flat have already been lost to "Songdo City." A third group of students, composed of Darryl Jones, Crystal Ward, and Monika Wozniak, used the semester to investigate how such a large-scale development, built on internationally endangered and threatened species habitat, could be advertising LEED certification titles. Since 2007, Songdo City has been included in LEED's Neighborhood Development (ND) international pilot project. While being in the pilot program does not indicate a status, the program has given Songdo City a marketing tool to falsely advertise its sustainability measures. The student group critically analyzed the United States Green Building Council's (USGBC) certifications, identifying room for improvement in its point structure system and clarity in site specifications. --- BY FIONA CUNDY

KOREA TRIP 2011

Birders watching Black-faced Spoonbills at Songdo

On May 16 2011, Yekang Ko of SAVE's Executive Committee attended "2011 International Symposium for Black-faced Spoonbill Conservation and Cooperative Network" in Ganghwa. This symposium specifically targeted to build a conservation network for Black-faced Spoonbills [BFS] between Korean and Japan; Yekang presented work by SAVE and LA205 (see "From the Studio" article) on Fukuoka and Songdo, entitled "Preserving vibrant habitat: Co-mingling urban and natural resources in Hakata Bay—the case of Fukuoka, Japan, and its implication for Incheon, South Korea" and met our colleagues from both Korea and Japan. Through SAVE's presentation, both Korean and Japanese participants learned how the existing development plans in Fukuoka and Songdo have threatened BFS habitats. More important, many researchers and activists agreed on the importance of developing alternative plans and appreciated SAVE's work in Korea and Japan. After the symposium, Satoru Matsumoto (representing Japan Wetland Forum & Japan BFS Network), Hisashi Shibata (a professor at Fukuoka University and also a SAVE Executive Committee member), and other Japanese colleagues gave helpful comments and feedback on SAVE's work. By incorporating their feedback, SAVE is planning to work further on Fukuoka in August and to present our work in the public forum in Fukuoka this fall.

After the symposium, Yekang met the Ganghwa Citizens' Committee to discuss tidal power issues in Incheon. The committee appreciated the analysis by SAVE and LA205 on tidal power projects, our letter of endorsement, and our recent publication in Environment magazine. The municipal government has reduced its proposal for Ganghwa Tidal Power Plant (TPP) by half, from 840 MW to 420 MW, but the Ganghwa Citizens' Committee still expects a lot of problems to occur in tidal ecosystems, local climates and fisheries. The committee also pointed out many flaws in the preliminary Environmental Impact Assessment report on both Incheon Bay TPP and Ganghwa TPP, especially the skewed cost-benefit analysis and uncertainty in their modeling. Not surprisingly, after Yekang returned to the United States, we got the good news that the advisory committee of the Ministry of Environment also pointed out those flaws, so the Ministry of Land, Transport, and Maritime affairs has been forced to defer the reclamation for Ganghwa and Incheon Bay TPPs. Although these tidal power projects are not entirely canceled, we have more opportunities to discuss the economic costs and the environmental impacts of the project.

With the full guidance of Yong Ki Ju (Director of Getbol Forum and Advisor of Birds Korea), Yekang also visited Saemangeum, where a massive tidal flat reclamation project has been occurring since 1991. With a cost of USD 6.2 billion, the project aimed to develop land of 28,300 ha and a freshwater lake of 11,800 ha, by building a sea dike 33 km long and filling the sea behind the dike. Just like Songdo, the promoters of Saemangeum aim to make it a preeminent "creative green waterfront city." The dike was completed in 2010; now water exchange between the open sea and the area behind the dike rarely occurs. Water quality is getting so bad, in fact, that local fishermen and women say they do not expect to harvest enough clams next year and they will have to import from China and North Korea. Much of the area behind the dike that used to be tidal flats, also, has become like a desert.

Saemangeum dike

About 20 km south of the Saemangeum dike, however, we could still see cause for hope. Yekang visited Gochang Tidal Flat, the largest area (at 40.6 km2) of the 14 Ramsar sites in South Korea. Sixty-eight species of benthic fauna and 77 bird species have been observed in Gochang Tidal Flat. One interesting sustainable practice was the restoration of tidal flats in the former fish farms that have been closed. Although the current site design needs to be improved, this project appears to be a positive start in South Korea, which has been rapidly losing its valuable tidal flats. --- BY YEKANG KO

SAVE IN CHINA!

Mudflat at Chongming Dongtan Reserve, Shanghai

In late March, SAVE members Wan-chih Yin, Randy Hester, and Marcia McNally visited the Shanghai Chongming Dongtan National Wildlife Reserve, which is a migration site for the Black-faced Spoonbill. They were accompanied by SAVE's newest members, Shan Yin and Lili Wu of Shanghai Jiao Tong University.

Only an hour from the center of the city, the Chongming reserve is the only real place left where Shanghaiese can easily experience nature. It is a Chinese Ramsar site, a staging and wintering area for millions of birds, as well as a spawning and feeding ground for 63 species of fish.

The staff at the Chongming reserve was welcoming. Vice Director Tang gave SAVE a briefing of the ecosystem and management challenges. Dr. Wu led the group to the far reaches of the reserve to see the "globally important estuarine wetland" at the mouth of the Yangtze River. This wetland is continuously growing eastward, up to an amazing 80-100 m per year, as the river brings new sediment from upstream. We also enjoyed a delicious lunch of fresh shrimp in the canteen.

Of particular interest to SAVE members was the effort to create open water habitat by controlling water levels and salinity. The reserve has a serious invasive species problem (Spartina, or cordgrass) which staff is attempting to eradicate, and which would result in additional spoonbill feeding grounds. The tour ended with agreement to work on finding an opportunity to collaborate with reserve staff in the future. --- BY MARCIA MCNALLY