

“Notes of a Grassroots Activist in a Foreign Land”
Japan 2005 Trip Report
October 11-24, 2005
By Paul Jenkin, Surfrider Foundation/Matilija Coalition

“In Japan, change has always come from outside.” This was the response to my questions aimed at trying to understand why hundreds of people from all walks of life had shown up to hear what I had to say about beach erosion and river restoration.

In March 2005, members of River Policy Network (RPN) visited Matilija Dam in Ventura, California. RPN is an affiliation of grassroots activists who have successfully stopped at least one dam construction in Japan. This group is now promoting river restoration, and is looking forward to the first dam removal in Japan in 2010, the Arase Dam. In order to increase awareness of the issues in Japan, RPN arranged a three city symposium tour in regions where rivers have become an issue of concern. Attendance at each event included over one hundred local citizens, government representatives, and university researchers.

The following report on my experiences in Japan is written as a sort of narrative journal, recording the activities as well as some of my personal impressions. (Keep in mind that my understanding of the culture and language of Japan is very limited, so someone more familiar may find my musings naïve or uninformed.) My philosophy, “think globally, act locally,” has motivated a decade of work for the coast and watershed where I live. The connections that I experienced with grassroots activists in Japan have reinforced the reality that my work has indeed become global. I am honored to be a part of international efforts to help restore our planet for a sustainable future.

Japan 2004

I first met Miori Aoyama in Tokyo in 2004. I had been invited to present at a conference organized by the Japan Ecosystem Conservation Society. This conference was intended to provide the Japanese government and researchers with information regarding Habitat Evaluation Procedure (HEP). I had felt a bit out of my league as I was presenting alongside two renowned US government scientists, but my presentation seemed to go well.

As Miori told me of her work with River Policy Network, I was immediately impressed with her energy and enthusiasm. So I gladly agreed to help her in her efforts to come to the US to visit Matilija Dam, and then to visit Japan for the 2005 symposiums.

In 2004, I also worked with Surfrider Foundation Japan, presenting at the Patagonia store in Tokyo as well as at the famous Kamogawa beach. This being my first trip to Japan, I was glad of the chance to see the coast, and immediately realized the extreme problems that coastal development and shoreline armoring had created in Japan.



Proceedings cover:
"International
Symposium"
Latest Technology
to protect Nature:
Learning HEP

October 11th – 12th **Travel to Japan**

I arrived at 5 pm in Tokyo, disoriented from the 11 hour flight and change in time zones. As planned, there Natumi Kataoka was waiting as I cleared customs. We took the train into Tokyo, and spent an hour or so in a small noodle restaurant before I caught the Shinkansen (high speed train) to Osaka.

Our conversation was revealing. Here was a young man who worked on and off as a translator of English language publications into Japanese. Although his spoken English was somewhat limited, I learned that he had translated such classic river literature as “The Monkey Wrench Gang” and “Cadillac Desert.” His passion for the environmental issues raised by these books was clear, and as the trip progressed I would find this common thread with each of the RPN volunteer members.

October 13th **Kyoto**

My first day in Japan, I was treated to a tour of Kyoto, the historic capital of the country. We enjoyed visiting beautiful temples and shrines representative of Japan, and of course experienced some fine local cuisine. In Japan, food is a most important part of the culture and daily life, with many different foods originating from the different regions of the country. This first day was an opportunity to recover from the 24 hour journey and jet lag, and get in “Japan mode”.



Temple in Kyoto

October 14th **Osaka**

As we were setting up for this first symposium, I was surprised to see the Surfrider Foundation video that I had brought to Japan last year playing as people arrived. Several surfers and Surfrider Foundation members were in the audience.



Surfrider “Sea to Summit” video with Japanese subtitles playing at Osaka symposium

This first symposium began with several presentations that provided the background for the Matilija Dam case study. First Mr. Ohta (President of River Policy Network) gave a report of the Dam Removal Tour that RPN took in the U.S. earlier this year. He showed the rivers and dams that they visited and described the general state of dam removal in the US. This was followed by a presentation on U.S. Environmental Laws by Lawyer Ms. Akatsu, and a description of the effects of dams and dam removals on habitat by Professor Murakami.

The Surfrider Foundation/Matilija Coalition presentation included a history of the Ventura River case, including the grass-roots efforts to generate support for the removal of Matilija Dam. The plan to remove the dam was described including the government process and technical studies. The question and answer session that followed showed a great understanding by the participants, many of whom had obviously studied the materials that had been translated into Japanese for the symposium.

This type of public presentation is actually quite difficult, as everything has to be translated both ways. I was fortunate to have a capable and very experienced translator, Miori Aoyama sitting by my side. But it is still quite exhausting as I had to pause after each sentence I spoke in order to allow her to translate.

October 15th Nagoya

The following day we traveled to Nagoya. We went straight to the meeting site to prepare for the afternoon/evening sessions.

Here the symposium followed a similar agenda as the previous day. In this case, however, we were treated to a passionate presentation on the status and problems of beach erosion in Japan by Dr. Takaaki Uda. Professor Uda has been working for decades to expose the plight of Japan's coast, and I had previously met him in Ventura at the "Sand Rights 99 Conference."



26. 浜松五島海岸 撮影 平成17年1月13日

Much of the Japanese coastline has fallen victim to extreme coastal engineering

Nowhere in Japan is the effect of dams and construction more evident than on the beaches. Looking at the situation in Japan, it becomes immediately apparent that the coasts are the world's most dynamic landform, and are highly sensitive to any unnatural perturbation. The result is shocking, and anyone who wants to see the most extreme examples of shoreline hardening should visit Japan to see just how bad it can get.

The examples Dr Uda presented are classic examples of Japan's obsession with coastal engineering. He was understandably passionate, as he has witnessed the needless destruction of almost every natural beach in Japan. (I liken him to his American counterpart, Dr. Orrin Pilkey.)

Following the presentations, which again included the Matilija case, a panel discussion was held. This was quite interesting and informative, and I learned that things that we take for granted in the US are still in the early phases in Japan. For instance, it has not been the Japanese way to speak up and get involved in decision making processes. An example of this is how the Japanese government has made it "taboo" to discuss the flood levels of rivers. I didn't understand this, but later it became clear that the government has used a non-science-based flood level, usually over-estimating floods so as to justify extreme flood control measures. As a result almost all of the rivers in Japan have been over developed with levees, dams, and "Sabo" (debris basins) in an attempt to exert complete control over the natural processes.

The evening session was intended to provide a more in depth look at the habitat assessment that was used in the Matilija Dam project. This has become a topic of great interest in Japan, as environmental assessment of projects is a new concept entirely. Virtually all the construction throughout the country was done purely for the sake of human benefit and economic development without any environmental review. There is considerable interest in Matilija Dam as a case study of habitat assessment using the HEP models developed and used in the United States.

The HEP (Habitat Evaluation Procedure) for Matilija Dam was designed to model the changes in the ecosystem of the whole watershed, including steelhead, riparian habitat, and sediment transport. The audience of scientists and researchers demonstrated very good understanding of the presentation through their very succinct questions. One question struck me as indicative of the situation in Japan; "If there is no structures upstream of Matilija Dam how will you control sediment transport in the future." I answered that the intent was to restore this natural sediment transport, and that yes, this is indeed a bold move. For Japan this seems an extremely radical concept, and I realized just how bold the Ventura County government has been to take steps in this direction.



Responding to questions about Ecosystem Restoration

That evening we stayed in the Nagoya airport hotel. Here I learned that Nagoya airport is another Japanese engineering marvel. Recently completed, this entire complex is constructed on an artificial island in Nagoya bay. Toyota Corporation funded the project, as it plans to move its worldwide headquarters to Nagoya.

October 16th **Kumamoto**

Following our morning flight to the southernmost main island in Japan, we were met by the Kumamoto Prefecture government officials. They had visited Ventura with RPN in March of this year to see Matilija Dam, and were happy to take their Sunday to show me around.

The main tourist destination near Kumamoto is Mount Aso, an active volcano with the largest caldera in the world. Along the way I learned that they use rice paddy fields to filter groundwater that is used for their main water supply. Most water use in Japan is surface water, so this is a new and progressive approach. And when we stopped to look at a wind farm I was impressed at the sustainable actions by the local government.



The flight past Mt Aso, Kumamoto Prefecture

Of course the target of our tour was Arase Dam. This is the first large dam slated for removal in Japan. Here I was shown the water diversion facility which goes through a tunnel under a mountain to a power plant downstream. (I later learned that the use of tunnels is common, and this was a small example of Japanese tunnel engineering) The Kumamoto officials also showed the fish

ladder, complete with viewing and interpretive area. The river has 11 native species of fish, one a native trout. Since dam construction the local fishermen have taken it upon themselves to collect downstream spawners and return them to upstream areas, thereby artificially keeping the fishery going. It seems that the fish ladder passes fish downstream, but upstream passage is unlikely.

Arase Dam was constructed in 1954, one the first dams in the region. Designed originally for hydroelectric energy for an isolated and growing community, it now supplies less than 1% of the local energy supply. It also needs significant upgrades and hardware replacement thereby precipitating the need to remove the dam. The cost of upgrades and water rights renewal do not make economic sense.

Because Arase Dam has a series of flood gates that are opened during large events, the facility has been managed to avoid large accumulations of sediment. This makes its removal fairly straightforward, although there is concern that the release of fine sediments will impact downstream spawning habitat. Therefore, the local government is already beginning to remove and truck away fine sediments in preparation for dam removal in 2010.



Visiting Arase Dam, the first dam planned for removal in Japan



The Kumamoto symposium included personal stories of declining fisheries

That evening, another large symposium was held near the mouth of the Kuma River. Here local fishermen demonstrated the historic abundance of fish and described the rapid decline in their livelihood since dam construction. The message I tried to impress upon the local community was how important it is to get involved and speak out, elect local officials to represent their best interest, and the bottom line, to fight for the survival of their local ecosystem that they depend upon.

October 17th Kumamoto Prefecture

First thing on October 17th, we visited the Kumamoto Prefecture office to exchange information relating to dam removal and ecosystem issues. This was largely a political meeting, but through some interesting but difficult discussion I tried to impress upon the government officials the importance of monitoring key environmental indicators before, during, and after the dam removal process.

We spent the remainder of the day touring a traditional Japanese garden, more of the river,



Japanese garden, with “Mt. Fuji” and manicured trees

the adjacent coastline, and the prominent mountain peak overlooking the city of Kumamoto.

October 18th Coastal Erosion and River Tour

On the morning of October 18th, we traveled by train and were met by an RPN member who took us to the beach in a van. I was surprised to see a group of locals who came out for my visit. They had invited the local paper along to generate interest in their efforts to save their beach and sand dunes.

Here the situation resembled a huge version of the problems experienced in Ventura. In Japan the situation is exacerbated by even more shoreline hardening and much bigger dams on a bigger river. Here we saw the extent of shoreline hardening and beach erosion problems, and saw where a landfill at the mouth of the river was eroding onto the beach downcoast of the channelized rivermouth.



Local activists with posters of beach erosion and dams – similar issues as Ventura



Large Dam on --- River provides hydroelectricity and trans-basin water supply

We then drove for couple of hours upriver until we arrived at an extremely large dam. Except for the rain-fed lush hillsides, I couldn't help but compare it to the Glen Canyon Dam on the Colorado River. The locals seemed proud of the facility and its ability to generate electricity. This was the first large dam built in Japan with the help of American engineers, which had apparently made the construction process much faster, setting the stage for more rapid dam construction throughout the country.

surplus of energy that at night during off-peak hours the water is pumped back uphill for re-release the following day.

As we stood on the dam crest, a constant stream of trucks was traveling past. Ever curious, I asked about this, and soon learned that this was part of a scheme to mitigate the extreme sedimentation in the reservoir. Annually 500,000 tons of sand are trucked over 100 km away to be used by construction companies working to

What an engineering feat! The river downstream was all but dry, as all the water from this huge watershed is diverted through tunnels in the mountains, both for hydroelectricity and water supply for a city in another watershed over 100 km away. They explained that the hydroelectric plant generates such a



Trucks transport 500,000 tons of sand per year out of the reservoir

build a new highway through the region. It struck me that even a fraction of this sand could easily be sent less than half that distance to the desperately eroding beaches that we had visited earlier. Perhaps this would be possible after the highway is constructed, but by then the sand dunes and turtle nesting habitat will be long gone...

The situation is not that far removed from that in the United States, where every river has been dammed and salmon are also on the brink of extinction. But I couldn't help but think that in Japan anything is possible – if they can construct such complex systems of dams, tunnels, railways, and highways, certainly some restoration measures could also be included. At what point will the economic and environmental value of the beaches and rivers be realized, and considered in the planning processes that are so rapidly destroying every natural asset in the country?

October 20th – 23rd **Naka River – hope for the future?**

Following the RPN Symposium tour, I took a few days to visit an old friend in Japan. I had met Hideki Nagona (“Ikey”,) while hitchhiking in Patagonia in 1993. Ikey had traveled the length of the Americas, starting with a canoe on the Yukon River, then a bicycle as far as Mexico City, and ultimately meeting up with us on the “budget” travel circuit in Argentina. He later came and stayed with us in Ventura for a month, all the while speaking of his dreams to become a ceramic artist in Japan.

It was serendipitous that I was able to visit Ikey at his home along the Naka River, about 3 hours north of Tokyo, where he has created a life as a ceramicist with his wife and son. Here the river was alive, such a contrast to all that I had experienced so far. The fall run salmon were returning to spawn, and the fishermen were out in numbers. The local fishing cooperative was operating their traditional fish trap, something that I had only seen pictures of. As we canoed along the river one day, we floated over the spawned out carcasses of salmon and witnessed salmon and steelhead fishermen working the pools along this relatively unspoiled river.



Ikey explained that the art is incomplete until a traditional meal is served on his handcrafted Japanese ceramics

As I spoke of my work, and the people I had met in Japan, Ikey became inspired to get involved to save his home river. I hope that one day I may return to Japan and celebrate the living wonders of free running rivers alive with the bounty of wild salmon.

