"Local Perspectives On the Tsunami Disaster: Untold Stories From the Sanriku Coast" Christopher S. Thompson March 5, 2012

http://www.japanfocus.org/-Christopher-Thompson/3706

This article strives to give a voice to survivors of the Great East Japan Earthquake who suffered from the tsunami but not the nuclear disaster; their invisibility makes the case that these survivors are a separate group of Japan's "abandoned people." They have been poorly represented in discussions on Japan's future energy policy; Thompson uses individual accounts to explain the residents' "short and long-term needs, the full social, cultural, and economic impact of the tsunami disaster, and the future prospects of the region."

In September 2011, Christopher Thompson made a volunteer trip to Northeast Japan, learning firsthand the needs and opinions of these "abandoned people." Thompson encountered the complaint that smaller communities are ignored by the government and international aid groups. Citizens in Iwate and Miyagi prefectures believe that while Fukushima's citizens are receiving aid they deserve and need, people in the northern regions are "left to fend for themselves." Thompson's own experiences suggest that their complaint is justified; when he visited the area six months after the disaster, many coastal communities had not yet cleaned up the mountains of refuse left by the tsunami. One year after the disaster, when Thompson's article was published, the situation still had not changed.

In addition, locals are not consulted about "the planning and implementation of their own recovery efforts." Many major volunteer organizations, headquartered elsewhere, do not solicit local opinions about what work needs to be done, instead trying to organize all recovery efforts remotely. Therefore, many volunteers end up doing work that is not essential. To remedy this problem, local coordinators of the volunteers often ask volunteers to change their activities, even though such switching of tasks is technically against the rules of most volunteer organizations. Thompson was told that his whole group would scrub out a school, but when he arrived, the local volunteer coordinator asked half of his group to clean up a river instead.

A final common theme among the locals was a desire to return to normalcy: this means not only clearing away the earthquake and tsunami damage, but also continuing activities such as celebrating annual festivals, which provide a welcome distraction from the reconstruction work and a comforting link to the past. Thompson argues for three changes that would be beneficial for Northeast Japan's "abandoned people." First, they need more aid than they are receiving. Next, they want more independent authority over the activities of volunteers. Finally, they want their choices to be respected. Unfortunately, Thompson concludes, even these simple desires may not be met, given the misunderstanding, disrespect, and discrimination that caused the authors gathered here to conclude that these rural citizens have also become "abandoned people."

# Local Perspectives On the Tsunami Disaster: Untold Stories From the Sanriku Coast Christopher S. Thompson

#### Introduction

On the Sanriku coast of Tōhoku (Northeast) Japan, almost one year after the Great East Japan Earthquake on March 11<sup>th</sup>, 2011, as tsunami recovery efforts shift from local, short term relief initiatives to long-term regional revitalization strategies, an accurate understanding of how affected residents perceive the disaster and are responding to it is crucial for implementing solutions to existing hardships and those to come. However, local perspectives on the tsunami disaster and relief-related issues, particularly from the dozens of small and medium-sized coastal municipalities in Fukushima, Iwate, and Miyagi prefectures (collectively probably the single largest block of tsunami survivors), are still greatly underrepresented in the ongoing discussion about tsunami recovery (Ito and Mifune 2011: 52-90; Takahashi 2011: 110-122). Without this local perspective, our understanding of coastal survivors' current lives, their short and long-term needs, the full social, cultural, and economic impact of the tsunami disaster, and the future prospects of the region are woefully incomplete.

Built on a foundation of long-term fieldwork in Iwate and ethnographic insights gleaned during participation in a disaster relief trip to the prefecture in late September of 2011, this account provides access to the voices of a small group of Iwate coastal locals who are among those who have typically gone unrepresented in tsunami-related news stories, policy making, and research.

### **Bus Trip To Otsuchi**

On the morning of September 25th, 2011 at approximately 9 a.m., I sat in a fold-out jump seat in the front row aisle of a fully loaded 50 passenger tour bus nearing the Port of Kamaishi on the Sanriku coast in Iwate reviewing the day's plan with Kishida Kachō¹ a top administrator at Iwate Prefectural University (IPU), who was kindly acting as our guide for the day. On the bus were 26 students and several staff members from IPU and 16 students and faculty from my institution, Ohio University (OU). This was our first fieldtrip together.

Nobody really knew what to expect. Ten members of our OU group were undergraduates based in Japan for the semester in study abroad programs at OU's partner institutions in Nagoya and Tokyo. I, their program director, had brought these students with representatives visiting Japan from our Dean's Office to Iwate for this three-day holiday weekend to be "tsunami volunteers." We had just met our IPU friends face-to-face for the first time the previous day, but we shared a common objective that had been discussed often over e-mail and Skype during the last several months: while participating in this disaster relief trip, to explore possibilities for a joint service learning project that could more effectively mobilize the students, faculty, and administrators from both of our institutions to listen and react to the needs of local tsunami survivors on their own terms. With this ambitious goal in mind, together, we were about to embark on our first tsunami "fukko shien," (recovery support) experience.

We were headed to the town of Otsuchichō, North of Kamaishi. Looking out the bus window, damage from the tsunami on 3.11 was still apparent everywhere. As we turned left off of the Kamaishi Highway (Route 283) onto Coastal Route 45 at the Matsubara intersection to head North to Otsuchi, we began to see live, the shocking after scenes of decimation each of us had witnessed with the rest of the world on TV or via video replay for days afterward.



Kamaishi, before and after March 11, 2011

Buildings reduced to rubble, yet to be cleared. Hundreds of wrecked cars piled three stories high, awaiting removal. The first and second floors of three and four-story buildings in the harbor district gutted to the core by rushing seawater that was reportedly 9 meters high at this location (Asahi Shimbun 2011a: 74). We even saw the fishing boats like those in the news - one half buried in beach sand, another still resting on the coastal Yamada Line train station platform, and a third crushing the roof of a small house.

#### **Local Opinions On Disaster Relief**

One of the many locally based Non-Profit Organizations (NPOs) leading the tsunami disaster relief effort in Iwate is Ginga Net, housed within the campus of IPU, located two bus hours inland in Takizawa-mura, Northwestern Iwate, near Morioka, the prefectural capital. It was through Ginga Net and IPU, and in particular thanks to a connection with Fujino sensei, a professor in the Welfare Department at IPU (which operates Ginga Net), that our OU group was able to organize this trip. Through Fujino sensei, I had also arranged for my OU group to participate in several planned activities in Otsuchi-chō with IPU students, first at a kindergarten, then nearby at the local junior high to help restore the facility.

As I worked from the U.S. to coordinate this project in April of 2011, I quickly realized that a majority of those in Iwate organizing relief efforts - civil servants, NPO staff members, volunteers from outside and well meaning Iwate citizens - shared a similar view. They believed that while the high profile disaster sites to the South (places such as Minami Sanriku [Miyagi] Onagwa-chō [Miyagi], and Sendai [Miyagi] continued, deservedly, to receive international attention and regular and predictable on-the-ground support for relief efforts there, many of the smaller coastal communities the size of Otsuchi-chō (population 15,277 [Otsuchi-chō 2011]) and smaller on the Sanriku Coast North of Kamaishi (towns like Yamada, Miyako, Tanohata, and Kuji) have been left to fend for themselves. During the day in Otsuchi-chō, I encountered plenty of anecdotal evidence to justify this opinion.

#### Otsuchi-chō

The bus pulled into Otsuchi-chō just before 10 a.m. By the time we arrived at the Volunteer Station just off of Route 45 onto Route 280 in the Kamichō district, all aboard our bus were silent - thoroughly shell shocked by the view. We parked on the street just past a public bus stop. To our West (inland) was a wooded area where a five-story elementary school had burned down after its lower floors had been stripped by waves of everything but the columns holding up the

upper floors, which at this location had been 8.5 meters high. Looking East (toward the sea), we were at the edge of what had been an expansive ocean-side residential neighborhood (maybe 100 residences) on what looked to be a coastal plain adjacent to Otsuchi Harbor. However, no houses were left. All that remained were empty water-saturated lots and slabs of concrete and rectangular remnants of block, marking the foundations of what was once there.

Everyone waited on the bus while Kishida Kachō, Fujino sensei, and two other IPU staff members took me and another OU colleague to check in at the Kamichō Volunteer Station. This turned out to be a prefabricated building built in an empty lot about a ten-minute hike through the woods up a hill into another residential area, where all the houses were in perfect order. It was quite a contrast to the area we had viewed on the bus. The administrator, a woman from Morioka, explained to us that the station had been built in the hills so that in the event of another large earthquake or tsunami, Otsuchi wouldn't lose its disaster relief hub.

We signed in as a joint work team from IPU and OU for our volunteer assignment, but it was necessary to change plans. Instead of all of us going to the kindergarten and school to clean up, as was the original plan, we were asked to split up into two groups. "This is what the hamlet coordinator in Sakuragi-chō (where the kindergarten is located) wants you to do," explained the administrator. "We don't have much oversight and local opinion is not often solicited so we are forced to make adjustments like this locally," she added. Wanting to be flexible and to adapt to local needs, we quickly agreed to the change. The administrator seemed relieved.

As we left the prefab, the administrator handed me a packet of registration stickers that each member in our group was supposed to wear on an outer garment in approximately the same place. "We need to keep track of who is official," she said, then reminded that if Otsuchi-chō could get enough participants together, an Aki Matsuri (Fall Festival) procession was planned for the afternoon. "Whether you are at the kindergarten or at the school cleanup, you might be asked to drop everything and participate. Will you be able to agree to that?"

"No problem," I replied, wondering why she was trying so hard to gauge our willingness to be flexible. Then Kishida Kachō explained:

This district has had bad experiences with relief volunteers before. Some volunteers like to come only to help with what they planned to help with. Really, what these locals need more than anything are people to share their pain and who will help give them a sense of normalcy. To outsiders, the *matsuri* is an exotic attraction. To locals, it symbolizes normalcy, as this is what we do every year in late September. Not celebrating the fall festival would be like not having Christmas! (Kishida 2011)

#### Yoiko Kindergarten

I led the kindergarten group. My first impression of Yoiko Kindergarten<sup>2</sup> was that it was immaculate – untouched by the tsunami. It was located in a residential neighborhood about 10 minutes by car from Kamichō in a district, further inland to the West. The district was protected from the harbor by a retaining wall, so all the residences looked to be in pretty good shape. Until seen up close. Examined carefully, still visible were watermarks on the outside of the houses, just under the rooflines. Cracks in walls, uneven ground, broken roofs, and crooked foundations were also apparent. However, the log cabin-style kindergarten building looked almost brand new, except for the water mark stains they couldn't remove from high on the inside walls. We

later learned that this was the first building the neighborhood association had decided to collectively repair because Sakuragi-chō was a working-class borough with many young nuclear families whose natal households were related to the fisheries, which are located closer to the harbor in the Kamichō area. To participate fully in local relief and reconstruction efforts, the young parents needed a safe place to leave preschool children.

For the first 45 minutes after our arrival, we danced with the 25 children, 2-6 years of age. Then, we played games with them. Finally, we read them stories in English, a tradition started by the Enchō sensei (director) to internationalize their curriculum, and to stimulate young minds as part of the postwar Montessori tradition in which she had been trained. At her request, we brought with us a suitcase full of English language storybooks to replace the collection that had been washed away. Since everything seemed so normal, we wondered for the first hour-and-a-half why this kindergarten had been chosen by Fujino sensei for us to visit. But as soon as the five teachers put the kids down for their afternoon naps, we learned from the 78 year-old director the rest of the story. Not all was as it appeared.

I was born in the year of the last great *tsunami* here, caused by the Showa Sanriku Earthquake on March 3rd, 1933. Maybe that's why I felt so strongly, unlike some others on our street, that we needed to get all of the children and teachers to higher ground on the hill behind our kindergarten when we heard on the radio that the *tsunami* was coming - even though we didn't hear any sirens. After all, I am a product of *tsunami tendenko*. My biggest regret about that day is in not convincing a grandparent who arrived here right at that moment to pick up her granddaughter to stay with us instead of going home to get her daughter and husband before finding higher ground. She drove down our street, up over the retaining wall, and turned the corner toward the harbor. Up on the hill, moments later, we watched as the *tsunami* formed in the distance and roared toward us over the roads on which she had just passed, crushing everything up to the second floor of everything in its path. I still wake up at night thinking about it.

Some volunteer visitors often ask us why we stay here in town instead of moving further inland or to some other city. These are good questions. But, the answers are simple. We don't move further inland because it's too expensive. We don't move away because this is our home. There have been *tsunami* here before. In fact, three others before this one since 1896.<sup>4</sup> And one might come again. If we left the area just because we were scared, then we would lose out. Lose out on a wonderful life by the sea, with the people (family and friends) who are near and dear to us. Part of our heritage is finding a way to survive these disasters, which are always a possibility here. But we can't recover alone. We need your help. Thank you for coming today. You made the children happy. This makes my teachers and me happy, and gives us courage to go on. We'd love to see you again. Can you stay for the *matsuri*? We rarely see our relief visitors more than once. Please come back, if you can. (Tsukamoto 2011).

In conversations with the kindergarten staff during our visit, we also learned that many of the children we had interacted with had lost a sibling, parents, other relatives, or friends in the tsunami. Most of them were still suffering symptoms of post-traumatic shock. The director also mentioned that several of the children had developed abnormal attachments to their teachers, and were having trouble going home at the end of their day. This is how we met Fujino sensei, she said. Through her job at IPU, she is helping us find the help we need.



A mural that depicts the poem "Ame ni mo Makezu" and fairy tale "Ginga-Tetsudo no Yoru" (Night on the galactic railroad), both by Kenji Miyazawa, on a wall at Okawa Elementary School in Ishinomaki, Miyagi Prefecture (Photo by Shinichi Iizuka)

Our final activity at the kindergarten was sharing lunch with the teachers. We all sat around a table and got to know each other. I noticed that not everyone took an obentō (box lunch). "Why?" I asked one of the young teachers who wasn't eating. "Those of us not eating are fasting for lunch to honor relatives we lost," she said. The lunch contains saba (mackerel). In March, we all lost family members who worked in the local saba fisheries."

### School Clean-up/ River Clean-up:

After lunch, our kindergarten group joined the others at Otsuchi Junior High School, where the rest of our OU-IPU group were not cleaning up the school, but the river next to it instead. The stream was about 6-8 meters wide, and ran down from a wooded hillside, adjacent to the school.

According to members of the neighborhood association who were working with the group, this job was the local priority, not the school clean-up. So the larger volunteer group from Tokyo we were scheduled to work with, intent on cleaning the school or some other facility, left for another project. But two IPU students, whose relatives live in Otsuchi, asked Kishida Kachō if our group could stay. They knew the local neighborhood association had experienced a lot of difficulty in attracting any volunteer groups to this river project until Matsubara-san from an ecological cleanup company in Nagano (central Japan) had agreed to take on the project. The reps told us he is originally from Namiita Kaigan just North of Otsuchi, so could relate to the importance of salmon in Otsuchi and to this project for locals. This particular week he had brought a high school group with him from Nagano to work in the stream. He was more than happy for our green-shirted volunteers to join his team.

As those of us from the kindergarten joined the effort, everyone pointed out the dozens of salmon, swimming up the stream through the debris to spawn! The purpose of this job was to clean the stream so the salmon could lay their eggs successfully and return the next year. Cleaning involved the removal of the top layer of oily sludge from the riverbed by shovel, carting it by wheelbarrow to a location where it would be put into plastic bags to be discarded. The debris had to be taken out and thrown away as well. By 3 p.m., most of the work was finished. It was then time for the closing meeting, led by Matsubara-san. As everyone gathered around him, he began to speak.

I hope you all learned something today about biology and about compassion for life. It is important to understand what different forms of life need to survive whether it be fish or animals or humans. I believe that if we could understand this better there would be fewer conflicts in the world such as wars, and we could make the earth a better place for both humans and animals. I am sorry that this region experienced a tsunami, but this devastating event didn't just hurt the people, it hurt the wildlife too. I hope you will remember from now on that where there are people, there is wildlife and both are important. I had a good time working with you today, I

hope you enjoyed yourselves too! I will be back to Otsuchi next week to work on another ecoproject, so please join me if you can! (Matsudaira 2011).

At the conclusion of the talk, everyone clapped, as much for Matsubara-san as for all the participants. Then the local neighborhood association representative thanked everyone for coming, and working so hard. "As you know," the representative said, "Cleaning the stream was our priority in this neighborhood today, not working on the school. Thank you for helping us achieve our goal." Before saying goodbye, he invited any of us who could to stop by Kozuchi Jinja (Shrine) on Route 280 near the former Otsuchi Elementary School to enjoy the matsuri in progress on the way home, adding that he and the other association representatives were headed there next for a long awaited folk performance ritual (dentō geinō gishiki). We were invited to join them there if we had time. Unfortunately, our group by now was in a little bit of a hurry, so politely bid farewell to everyone, then boarded our bus for the two-hour trip up the coastal mountain pass to Hanamaki, where we were scheduled to spend the night.

### Departing Otsuchi-chō

It took a moment for me to make the connection, but Otsuchi Elementary was the school across the street from the bus stop where we had begun the day. As we passed Otsuchi Elementary, I could see Kozuchi Jinja to the left of the school building built quite a way back up into the hillside. As I squinted to try to see the structure as we passed by, Hasegawa sensei, another IPU professor on the trip, who I had happened to sit next to, said, "It was built far enough up on the hill so that the tsunami didn't touch it," as if he knew what I was thinking. I hadn't even noticed the shrine earlier that morning, but now the entire compound was lit up with colorful lights, and there were many, many food stalls set up. Flute and drum music could be heard faintly outside, even from inside the bus, and a large crowd was beginning to gather. "Next time, you definitely must go, sensei," he told me, judging from the look on my face how badly I wished we could stop.

"I'd like to," I said. And not wanting to waste the opportunity, decided to ask Hasegawa sensei, a history professor, if he knew anything about the folk performance ritual alluded to earlier by the neighborhood association representative. Knowing of my interest in Iwate folk culture, he then proceeded to give me quite a detailed explanation:

Within the local hamlet culture of the Iwate coast, there is a traditional folk performance (minzoku geinō) called Mawari Kagura, in which the area's Shinto shamanic dance troupes visit specially selected kominkan (citizens halls) and minka (traditional [thatched roof] farm houses) along the coast during the early months of a new year, to perform special rites that bless local residents, protect them from misfortune, and help them pray for bountiful harvests both on land and at sea. Kuromori Kagura and Unotori Kagura from Miyako are the most famous. Other more local troupes also exist.

According to my relatives on the coast, since the *tsunami* on 3.11, special performances of Mawari Kagura have been commissioned in many coastal communities to help the inhabitants pray for healing and to console the spirits of the dead. Other folk traditions that contain prayer rituals have experienced a similar resurgence as well. This is how Iwate-jin (Iwate residents born and raised in the prefecture) traditionally responded to large-scale tragedy of all types. They look to the indigenous folk expressions of their ancestors for comfort and the strength to move on. Then they take this wisdom from the past and apply it to the present and pray for the future. For

anyone interested in how the communities on the Sanriku coast will deal with the *tsunami* disaster, I recommend paying careful attention to the way expressions of traditional culture that may have faded away in recent years begin to reappear and become reintegrated back into daily life within these coastal communities. (Hasegawa 2011)

### **Final Thoughts**

This was only one day spent on the Sanriku coast. Nevertheless, by interacting with the residents of Kamichō and Sakuragi-chō in the town of Otsuchi, several patterns useful for beginning to understand local, small town coastal perspectives on the tsunami disaster and its aftermath began to emerge. First, both relief workers familiar with the small towns on Iwate's Sanriku coast and the local residents we encountered in Otsuchi perceived that support efforts have been slower to reach this area and less refined than in other high profile parts of the disaster zone. Based on my observations in Otsuchi, there seemed to be some truth to this critique. Second, local residents both at the kindergarten and the stream cleanup demonstrated a strong desire to be active in the planning and implementation of their own recovery efforts, yet don't seem to be adequately consulted. A third pattern that emerged is that local residents we met in these two districts also sensed that local priorities are not clearly understood or valued by outsiders who come to help. This is why partnering with relief workers and volunteers familiar with (or at least sensitive to) small town coastal life (such as the IPU faculty, staff, and students, and Matsudaira-san) is so crucial in the long-term recovery effort, because they can advocate for local needs and help the rest of us to tune into local priorities. In this vein, relief volunteers might also consider making longer term commitments to the communities they work in so they can build in return visits, another local wish that seemed often to go unfulfilled.

Finally, Hasegawa sensei gives us some good advice about what is important to coastal locals when dealing with the *tsunami* or any major human disaster. In rural communities both in inland and coastal Japan, solidarity, unity, and trust among its members has historically been maintained in good times and in bad through collective participation in the rituals and festivities associated with a local guardian deity. What the locals residents we met in Otsuchi wanted most was not to be given a new future or a one-size-fits-all solution to the *tsunami* related problems they faced, but outside input to help them re-imagine (through a long-term relationship built on participation in their traditional culture) a way in which their local wisdom from the past can be combined with good ideas from the present and applied going forward for use over the long haul. As Hasegawa sensei said to me later that night as we soaked in an *onsen* in Hanamaki, "This is the Iwate-way, the Tōhoku-way, and perhaps the only way we know how to build a future, one day at a time." (Hasegawa 2011)

The next day, on the Shinkansen ride Southwest to Tokyo, we knew what we had to do. We would have to find a way to get back to Iwate. In order to make the kind of difference most meaningful and long lasting to both Otsuchi residents and to ourselves, we will have to participate in building their future, with our IPU friends, one visit at a time.<sup>5</sup>

See the video <u>Curtains of Love for Otsuchi</u>.

Christopher S. Thompson is Associate Professor of Japanese Language and Culture and Chair of the Department of Linguistics at Ohio University. He is co-editor of Wearing Cultural Styles In Japan: Concepts of Tradition and Modernity in Practice and numerous articles on Tōhoku culture and traditions.

#### **Notes**

#### **Bibliography**

Asahi Shimbun Publishing, 2011a. Higashi Nihon Daisinsai: All Media Photos from 3.11 - 4/11. Asahi Shimbun Publishing: Tokyo. pg. 74.

Corkill, Eden. 2011. Fumio Yamashita: May His Epitaph Be Tendenko. Japan Times On-line, December 18<sup>th</sup>, 2011.

Fujino M. (Pseudonym) Interview in Otsuchi-chō. 25 September 2011. Iwate, Japan.

Hasegawa J. (Pseudonym) Interview in Otsuchi-chō. 25 September 2011. Iwate, Japan.

Ito, Shigeru and Mifune Yasumichi. 2011. Higashi Nihon Daishinsai kara no Fukkou Oboegaki (The Great East Japan Earthquake Recovery Memoir). Manraisha: Tokyo.

Kishida M. (Pseudonym) Interview in Otsuchi-chō. 25 September 2011. Iwate, Japan.

Matsudaira H. (Pseudonym) Interview in Otsuchi-chō. 25 September 2011. Iwate, Japan.

Otsuchi-chô 2011: Population of Otsuchi: January 25, 2011, link.

Tsukamoto Y. (Pseudonym) Interview in Otsuchi-chō. 25 September 2011. Iwate, Japan.

Yamashita, F. 2008. Tsunami Tendenko: Kindai Nihon no Tsunami-shi (History of Modern Tsunami). Shin Nihon Suppansha. Tokyo.

<sup>&</sup>lt;sup>1</sup> Kishida is a Japanese surname. Kachô is an administrative job title, which means, division chief. In this text, all Japanese surnames are pseudonyms and titles are disguised in order to protect the individual and collective privacy of everyone cited.

<sup>&</sup>lt;sup>2</sup> Yoiko Kindergarten is a pseudonym to protect the privacy of the institution.

<sup>&</sup>lt;sup>3</sup> Tsunami Tendenko is a Tōhoku folk phrase that represents local wisdom pertaining to tsunami that evolved in the Sanriku coastal communities after the Show Sanriku Earthquake in 1933. Tsunami tendenko is an abbreviation of a concept that suggests, "When a tsunami is coming, don't try to look for your relatives. Don't try to help the elderly, your grandparents or your parents. Don't try to call your wife or your husband. Don't think about your children or your grandchildren" (Corkill 2011). It is best for the family, for the neighborhood, for the school, and the community, to escape to higher ground (even if by yourself) as soon as possible no matter what when a tsunami is thought to be coming, in order to cut down on the loss of life. In the tsunami that resulted from the 1933 and 1960 quakes that led up to the latest on March 11, 2011, many lives were lost unnecessarily by individuals who went looking for or waited for others they were with instead of escaping alone when the tsunami was known to be coming (Yamashita 2008).

<sup>&</sup>lt;sup>4</sup> Three *tsunami* have hit Otsuchi since the late 19<sup>th</sup> century. They were produced by the Meiji Sanriku Earthquake in 1896, the Showa Sanriku Earthquake in 1933, and the Chile Earthquake in 1960. A fourth *tsunami*, larger than any of these, is thought to have struck the Iwate coast in the year 869 following an earthquake estimated to be a magnitude 8.6 (Mainichi Shimbun 2011)

<sup>&</sup>lt;sup>5</sup> For further information about the OU – IPU Tsunami Relief Initiative, see Appendix.

## Appendix

<u>Link 1</u>. OU Media story on this tsunami relief trip published September 21<sup>st</sup>, 2011.

<u>Link 2</u>. OU Senior Brandon Donor's original video about this tsunami relief trip made on September 27<sup>th</sup>, 2011.

<u>Link 3.</u> IUP Information Page report on the OU – IUP joint Tsunami Relief Project.