A visit to the eastern shore of Japan - Miyagi/Iwate Written September 22, 2012

This story began as an effort to give a brief picture of what we saw on the north east coast of Japan a little over year after the Great Tohoku Earthquake and Tsunami. The story turned out to be much bigger and more complicated than I first envisioned. It really is a story of the resilience of the people of northern Japan – both the survivors and those who gave them aid and support. And their turmoil continues today, mostly hidden from the rest of us. It is a story that was poorly covered by the global media even in the weeks after the disaster. They, instead, chose to headline the Daiichi nuclear disaster where, to date, only a few people were injured or died from the events at the power plant. The Japanese media and the people in Iwate have not forgotten. In fact, there continues to be lots of coverage of the survivors during the time we were in Japan in April.

Early in April of this year, Ryoko and I got on a plane and flew to Japan for a one month visit with friends and family. After a long tiring flight we rode trains for another 4 hours to our old home in Mizusawa (Oshu), Iwate in northern Japan. It was cold with brief snow flurries that first evening but spring was already coming to the north in spite of it. A few days later after we had rested and gotten settled, we took the train south to Sendai to visit the bank. Sendai is in Miyagi prefecture which is south of Iwate prefecture. After our short visit to downtown Sendai we took the local train out to the coast where we got off at Matsushima kaigan and walked to the Zuigan-ji shrine. More than a year after the Tohoku Tsunami, there were still vestiges of the devastation. The shrine is very close to the sea and there were still some signs of flooding there. The harbor where the Matsushima tour boats docked had some evidence of the force and height of the water. However, the small islands that are covered in pines that are in the bay there seemed serenely untouched.

Had we gone on to the next town of Ishinomaki, we would have seen a great deal more of the devastation there. Ishinomaki (population 112,200) suffered the most casualties of all the towns on the Japanese coast that were hit. 3173 souls were killed or missing and presumed dead. That was 2.8% of the total population of that city. Much of the city was destroyed. Along the rail route from Matsushima to Sendai there were groups of junk cars here and there but at the distance from the coast where the rail line was located, all seemed relatively normal.

In all of our travels near the coast we saw quite a few prefabricated housing areas dotted throughout the coastal areas. They looked like small trailer parks with the modules neatly and tightly packed together.

Toward the end of April we borrowed Ryoko's sister's car and headed for the coast of Iwate for a day trip to the port town of Ofunato. Tohoku in the spring is very pretty and it was wonderful to travel through the mountains and valleys on our way to the coast. Through one of the passes on the way to the coast there were even some patches of old dirty snow. In this part of Japan there are only very small villages on that highway. And not much traffic. In the past we rarely drove down to the Ofunato harbor but usually turned off to the southeast to Rikuzentakata / Takatamatsubara and the beautiful beach there. This day we continued on to the Ofunato harbor and right up until we got there, everything seemed normal and untouched. As we came over a hill into the harbor area, the panorama of the place went from normal buildings to a scene of a wide dirt field with a few scattered large concrete buildings. The harbor at sea level up to about 15 feet had been picked clean. Right after the tsunami hit, this whole area was a jumble of wrecked buildings and cars as if large fists had pummeled all of it into rubble. A number of boats including several large ones were stranded on land inland from the harbor. It remained that way for several months until the clean up effort could be organized. As we looked more closely at the details, we could see hundreds of concrete rectangle outlines of old building foundations. Typical Japanese building methods do not use full concrete pads for their smaller buildings but only narrow concrete foundations on the edges of the rooms of the building. The dirt where the damaged buildings once stood was mixed with thousands of tiny pieces of "stuff". The few standing buildings that were made mostly of concrete and steel on closer examination were very badly battered. Several small concrete flood-gate stations that were at the mouth of streams that flowed from the nearby hills into the harbor area and that regulated water flow were still standing but badly damaged. A three story sightseeing tower in a harbor park near the piers, was severely damaged up to the second story. Substantial stainless steel railings on the first floor were twisted like taffy and a large several ton low granite monument in the park had been shifted dozens of yards off its base. I tried to locate the base but could not find it. However, the monument had shifted out to the middle of a large wide area of tiled steps and flat tiled space. Many of the tiles were gone and another chrome steel monument that was also part of the park was bent over from its original position 20 feet

in the air to horizontal to the ground. A few dead trees with some larger branches, still stood in a row along the road behind the concrete piers. The main part of the larger branches were still there but none of the smaller limbs remained and the sharp points of those remnants pointed inland indicating the direction of a violent flow of water. As we stood there near the mouth of the harbor and looked inland from the sea back to the end of the harbor we could see a swath of mostly empty land that was about 500 yards wide and about a mile long. Across to the other side of the harbor, past 150 yards of open water, there was a similar view of flat empty space. Some of the roads had been cleared and were now in use. Traffic signals and some power lines had been restored. There was even a "building-less" filling station in use. Power to the makeshift pumps on the ground above the underground tanks had been installed and what looked like a tiny temporary storage shed now made up the only tiny bump above this strangely flat bare looking "gas station". It was eerie watching cars travel across this flat plain and seeing other activities occur on this leveled ground. All the debris in the Ofunato harbor had been removed before we showed up on that April day. The remarkable geographic feature of the harbor is that within a fairly short distance on both sides are some easily climbable hills that would allow one to quickly get out of harms way if you heeded the tsunami alarms and climbed up their slopes or up along the many city streets above the harbor. Still, Ofunato had a total 451 deaths and missing residents (and presumed dead). The majority of the deaths from the Tohoku Tsunami occurred among people older than 50 years.

The first big earthquake occurred at 2:46 PM on March 11, 2011 in the deep trench in the ocean east of Iwate. From the numerous stopped clocks in the cities up and down the Tohoku coast, the first big wave arrived about 25 to 60 minutes later (from about 3:11 to just before 4 PM). The huge Magnitude 9 earthquake produced a very large rolling motion that lasted several minutes. A friend of mine in Mizusawa described it as "going on forever" while he watched the world around him move like a large ocean wave. Remarkably he noted nothing very small came off shelves though large items did tumble. My experience of a large earthquake in Mizusawa in the 1970s was of some serious jerking motions that trashed our kitchen with almost all the items falling from the shelves on to the floor. According to several government reports, tsunami warnings had quickly been sent out by 2:50 PM.

Life as we saw it that day in April 2012, a few yards above this destruction zone, was normal and activity in the destruction zone seemed to be picking up. We left Ofunato enroute to Rikuzentakata just to the southwest. Traveling through the hills and valleys along the coast we would often see the shoreline and empty land where small villages used to be. All that was left of human life on the shore were small pristine spots of bare earth with varying numbers of concrete rectangles of concrete foundations. They were stark reminders of the recent deaths that had occurred there. Also dotted here and there along the coast up from the shore, we could see the temporary housing modules where most people were moved after staying in school gyms and community centers right after their homes were completely destroyed on that day. Of course parts of the villages (and complete villages several yards above the disaster zone) seemed untouched.

We finally came out of the green forested coastal hills to a wide view of what once was Rikuzentakata. This scene was very dramatic because we knew that the cleared plain below us had once been a large part of the city. This northeastern part of the city was mostly residential with small shops with no large reinforced steel concrete or steel framed buildings. Almost all of the buildings in this area were once sturdy wood frame buildings with metal siding. Now as we gazed to the southeast we could see a very long and wide plain with no standing buildings at all.

A chilling experience told to us by our good friend Hitomi who is from Mizusawa occurred shortly after the disaster. She could not get any gasoline at first but when she could in late March 2011 she drove over to the coast. As she came out of the forest probably the very spot we were now at, she saw this broad expanse of jumbled buildings and devastation. She thought it very strange that it was all snow covered, very white. When she looked closer she was terrified to realize that everything down below was covered in a writhing mass of white maggots.

Her reason to go was that she was on a mission to help the people on the Iwate coast. A number of our friends volunteered to do a variety helpful tasks on the coast last year. The tasks ranged from volunteering time on several occasions to carry documents and legally execute guardianships for almost 90 orphans remaining there as well as simply taking prepared food on a regular basis to the evacuation centers. One of our friends who does therapeutic massage for his work went to the coast

several times to give free massages to older people and people under stress.

Now, more than a year later, we saw an empty plain that went off to the southeast horizon for about 3 miles to the coast. A half mile away toward the shoreline to the south, we could see what seemed to be several small piles of jumbled "gomi" (garbage). On closer examination there were large earth moving equipment and trucks working at these piles and these vehicles were dwarfed by the piles. The piles were at least 3 or 4 stories high and they were the remains of what used to be peoples houses and stuff. Cars, tires, splintered wood, sheet metal roofing and siding, windows and all sorts of flotsum and jetsum of people's past lives were in those piles. The thought of these huge jumbled monuments of everything that so many people had once cherished and the magnitude of the death there, brought tears to our eyes.

We drove down to the empty plain on a newly paved road. A few of the old roads had been uncovered but other than the clean-up crews and mostly large trucks using the main road, there was little need for roads in that whole area. Power and communication lines had been replaced and a few traffic signals had been reinstalled where a rare still useful road crossed the main one. We pulled off the main road onto what was probably the original main road and got out to view the large empty space. Here and there we could see unused rice fields scattered across the plain but at that time in early April more than a year later there were only small signs of vegetation throughout the whole empty area. Apparently the "salt load" is still very high in all that sea soaked low lying ground that is found along the coast so that there is very little growth there yet.

Unfortunately, almost all of Rikuzentakata in this area and farther south toward the main part of town was near sea level. And very little of the town in this low lying plain remains. There were 1553 people killed whose bodies were found and 395 people who are missing and presumed dead in this town of nearly 24,000 (a total of 1948 people dead). Rikuzentaka is second to Ishinomaki (mentioned at the beginning of this piece) in total numbers of deaths as a result of this disaster and fatalities here equaled 8% of the total population of the city. Several small towns in Miyagi and Iwate prefectures had fatalities that were greater than 10% of their populations.

We got back in the car and drove west along the new blacktop road that was now the highway into the center of Rikuzentakata. We came to some large seawalls that had been heavily damaged. We pulled off and parked on a side road and walked down to the walls and the sea. This wall was about \(^3\)4 of a mile long and half of it was badly damaged. The construction of the sea wall when seen in cross-section would show a large trapazoid pattern. The foundation was probably concrete pilings with a fairly thick steel re-bar reinforced concrete face on the front, back and top. Most sections of the wall were of this design which at the base was 10 yards deep front to back and at the top was about 5 yards deep so that the front and back faces slanted up at about 50°. The height of these walls was about two stories. In every case that I am aware of, the tsunami easily over topped these walls as well as walls that were much taller. Data indicated that the maximum height of the 2011 wave was just short of 42 meters with average height of 40 meters. Even if the wave in front of this wall turned out to be 30 meters, the wave face would still have been twice the height of the wall. The interior of this truncated triangular structure was probably packed with large rocks and fill. The construction was such that these filled portions of the wall were done in approximately 40 yard sections side to side. There were probably 20 or more of these sections side to side all the way up and down this protected part of the coast where the wall was built. In a few spots along the wall there was no fill but only a vertical one foot thick reinforced concrete wall. Several spots in those less fortified sections had been broken by the tsunami and the wall was completely breeched. In a few places the tilted front (sea) face of the filled section type of wall had been broken and the fill had been partially washed out of that section as well as the adjoining section. We climbed up to the top of one undamaged section of the wall and could still see a small pickup truck near the gravel base of the sea side of the wall that had not been retrieved yet. There was a complete trunk of a large tree washed up parallel to the base of the wall next to the truck. The tree was probably at least 50 feet long. We were probably looking at remains of one of the pines from Takata Matsubara, the forest that was completely washed away. The truck seemed to be mostly intact but was beginning to seriously rust. In that section of the coast nothing remained except the highway and the wall and its broken remnants. There was lots of trash and small broken pieces of things that had once been inside the houses of Rikuzentakata. We got back in the car and continued driving to the southwest up a tree covered hill that was part of a finger of land that

came from the mountains to our right and went out into a peninsula that dropped into the sea to our left. On the other side of the hill we again saw the mostly empty plain that was the southwest part of Rikuzentakata. Since, in the distance, we saw a number of multistory concrete buildings we could tell that we were approaching the downtown area. What was interesting is that most of the large still standing buildings had the first floor scoured out and they were mostly unoccupied. It looked like some of the original occupants were starting to try to get the 2nd floor and above parts of the buildings back in shape. There were less than a dozen of these large buildings in that whole area. Nearby was a strange "downtown" quadrangle of small modules that included a bank, a small store, an old bus that looked like a resturant, a gas station, an office or two that were actually very small prefab trailer like structures. Temporary power lines were strung to this little group of buildings. I think there were several tent roof structures that were also occupied that day because the weather was good. This seemed to be a small kernel of downtown that was starting to form to begin to deal with very fundamental needs of the people who remained in the area.

This downtown site of one of a few skeletal buildings, that we saw that day in 2012, was the place where a fateful event took place for 9 of the 11 members of the Takata High School swim team. That afternoon in 2011, those 9 members had left school to go to swimming practice at the B&G Swim Center near the seafront. The mostly girl team members had just changed into their swimsuits when the earthquake occurred and the B&G staff quickly took them all to the community center which was the established evacuation site after a tsunami warning. When the tsunami came on that day shortly after they had arrived at the center, 3 of the girls had rushed up to the 3rd floor of the center and were running down a hall to a door. The wave moved past them and broke the door in front of them, swept one of the girls out of another's grasp, and pushed two of the girls into the small dark storeroom that was behind the door. These two girls were pushed inside the small closet and trapped there as they watched helplessly while their friend was pushed to the elevator and then away. The two remaining girls were then quickly lifted to the ceiling of the tiny room to the point that only a few inches of air remained. They were able to dog paddle and breath for the 15 minutes it took for the water to subside. These two of the nine, were all that survived. It seems truly a miracle that they made it. They still have nightmares and, of course, some serious survivor's guilt. And especially so,

because of the girl who was pulled from their grasp and carried away to her death while they could only helplessly watch.

More than a year later as we drove across the remaining plain, so much was gone that it was hard to find the highway back to Mizusawa. Only a few highway signs remained. We passed several more huge piles of debris that were near the road. The mounds had been quickly pushed and piled there to clear the large flat areas behind them. Small groups of workers were sorting through the mess to separate splintered wood from scraps of metal from pieces of concrete. There was one whole pile of car wheels and tires. The junk cars of the town had already been hauled away. Trucks were being loaded to haul the separated material away, still more than a year later. It clearly will be awhile before those piles are gone. I remember seeing a fleet of double decked semi-truck car trailers in Mizusawa that must have belonged to a company that was contracted to haul destroyed vehicles from the coast. In all there were about 240,000 cars destroyed by the tsunami. There are some good photos of the general destruction at this site: http://www.theatlantic.com/infocus/2012/03/japan-earthquake-one-year-later/100260/. Some of the photos can be "clicked" to get "before" and "after" views of the scene. Several of the shots show Rikuzentakata.

We came to a road that looked like it might be the highway inland to Mizusawa and we saw some power line workers at the fork and stopped to ask directions. I noticed that the license plate on their truck was not Iwate and sure enough the guy told Ryoko that they had just arrived two days before and he pointed at his Tama plate (Tokyo) and said he had no idea how to get to Mizusawa! Here and there across the plain were workers like these rebuilding the power and communication lines. Some of the reconstruction and clean-up work is being done by contractors from other places. There were a lot of volunteers in the early stages who did huge amounts of clean-up work. Without clear directions, we turned right anyway and stopped at a house a little way up the road into the mountains and the lady confirmed that we were headed in the right direction.

If we would have continued to the left down along the coast we would have surely reached what was left of Takata Matsubara the pretty little beach that had a nice stand of 70,000 pine trees behind it. Many times we had visited this beach and swam in the small cove there. We often picnicked in the pines near the beach. I have also seen it in the gray win-

ter with a cold wind steeping the waves with foamy white tops. It was neat in any season. There was also another seawall like the one I described above between the beach and the trees. We looked in that direction when we stopped but could not find it. Later we found out that the whole area due to the earthquake had dropped into the ocean and that the beach and all the pines were completely washed away by the tsunami (see the website noted above for pictures). The wall here had a huge steel gate in one of the wall sections that had become very infamous. These gates were also found in the wall in a city north of here called Miyako. The Miyako gates were almost twice as tall as those found in Rikuzentakata. They allow people to pass through the seawall from the upper valley down to the port during normal times and during a tsunami alert they can be closed to block the surge. Of course in all cases except far to the edge of the main tsunami event, the 2011 tsunami wave overtopped all the barriers along the Tohoku coast. Six or seven firemen there in Rikuzentakata were swept away when they attempted to close a jammed gate on the seawall. It was tragic that the city had not done proper maintenance on the gate and right up to the arrival of the first wave, these brave men continued to work to close it. No one could have known at that time that nothing anyone could have done would have stopped this monster wave. They were basically doing their job to the end, as firemen the world over do daily, often in the face of death.

Driving back toward Mizusawa we quickly moved a few yards above the flood plain and were back among houses untouched by the disaster. As if by magic everything immediately returned to normal and all the unbelievable scenes of disaster seemed like only a bad dream. Still, coupled with the dramatic video we saw of the tsunami ripping the buildings of Rikuzentakata off their foundations and crumbling them to pieces and the huge empty plain dotted with huge piles of debris that we saw this year at that same place, it is an unforgettable nightmare. The stark dichotomy of the beautiful forests that we traveled through that day and the violent earthquake and tsunami and their consequences left us completely awestruck. Nothing we had seen in the past year had prepared us for the stark reality of that day. There is no way to fully understand the enormity of this event without going there. At first in the midst of all this, there is a sad stark silence from the empty spaces and the missing victims. However, being there that day, it started to sink in and we could begin to sense these quiet voices speaking to us earnestly with great sorrow. The strong emotion left us mostly speechless and in tears.

During the rest of our time in Tohoku we listened more carefully and paid more attention and we could then begin hear the oftentimes sad but determined voices of the actual survivors speaking of hope and the future.

Within a week of the disaster there were 385,919 evacuees living in a variety of evacuation centers which were mostly school gyms and community centers. By the end of 2011 almost all of these evacuees had been moved out of these centers and relocated to temporary housing or homes of family and friends.

Our friend Hitomi wanted to discuss the role of the U.S./Japan military in all the early efforts to help the survivors (and in the case of the Japanese Self Defense personnel in finding the dead and continuing to search for survivors in the rubble). It was a joint effort of the two services called Tomodachi (Friend). These joint teams were almost always the first outside teams into the stricken areas. Hitomi was very complimentary of the quick and steady support of the U.S. military especially the Marines and Naval personnel (and of course the Japanese military too). She had heard lots of positive reaction from the people of Iwate to all U.S. military helicopter support to bring food, water, blankets, heating fuel, and medical supplies to the more remote areas of coastal Tohoku. The aircraft carrier Ronald Reagan was part of a U.S. naval ship task force that responded to the emergency. The Reagan passed through a thin cloud of radioactivity on its way inbound and even though there was very little danger, they went through a full decontamination drill which probably turned out to be some valuable and realistic practice. The carrier was used as a mobile refueling depot which was one of several refueling depots used for the hundreds of chopper flights undertaken in the first few weeks. Both U.S. and Japanese relief helicopters were flown along the Tohoku coast during that time. Within 2 weeks these flights supplied over 1.5 million gallons of drinking water and about 100 tons of food and other supplies. The U.S. Navy quickly barged 225,000 gallons of fresh water to the pier where the Daiichi Nuclear Power plant was situated - to be used to cool the overheated facilities there. A small team of U.S. Marine radiological and biological specialists were made available to the Japanese early in the nuclear emergency.

There were 100s of flights over Fukushima prefecture probably made by U. S. military aircraft under the direction of the U.S. Department of Energy to take daily airborne measurements of radioactive levels for the first

several weeks after the earthquake/tsunami. I am not too sure how or who specifically carried out this operation. It was a U.S. initiated, Japanese sanctioned project. Even though the DOE website noted that the info was not for release to the public and probably should have remained confidential, I found all the data from these flights fully available there on the website.

Of course these professional first responder military rescuers were later joined by a large number of local and international teams. The Japanese are very quick to help their neighbors but in this disaster many of the people who were in the earthquake zone and near the tsunami zone had no electrical power and quickly started to run out of food and fuel themselves. Finally after several days, power was restored to homes in Mizusawa and we happened to call Ryoko's sister just minutes after that. They were not even aware of the large amount of death and destruction that had occurred just 50 Km east of them on the coast. In the first week, some of the foreign dog search teams were having trouble getting their dogs through the strict quarantine rules. As it turned out there were very few even one, two, or three week survivors found after this event. Those were mostly earthquake survivors because the deep water of the tsunami drowned almost everyone in its path.

Financial loss probably totaled more than \$250 billion. The total number of completely destroyed buildings was about 110,000 of which 90% were destroyed by the tsunami (10% by earthquake and related events-slides, fires, etc.). Almost a million buildings were either destroyed or damaged. 200,000 buildings were partially destroyed (50% from the quake and 50% from the tsunami). The quake partially damaged another 560,000 buildings while the tsunami partially damaged about 70,000 buildings.

Ninety four percent of all the deaths (of 15,848 dead and 3305 missing) came from the tsunami. The other 6% came from quake related issues. Miyagi prefecture suffered the most casualties with 9,508 dead and 1769 missing. Iwate prefecture suffered 4,669 dead and 1316 missing. Rikuzentakata comprised almost 33% of the dead and missing (1948 total dead) in Iwate. And Fukushima prefecture suffered 1,605 dead and 216 missing. All other prefectures combined totaled 66 dead and 4 missing.

One more telling set of statistics relates to the age of those who died. The great majority of deaths were in the age group of 50 and older. This older group made up 79.6% of the deaths while 22.3% of the total were over 80. 48.5% of the total were over 70. There was probably enough time for all to be evacuated except for a few who had limited mobility and were by themselves. And there was probably a large percentage of this older group that "had heard the cry - wolf" many times and just stayed put.

And life goes on. People are now trying to come up with a land use plan in the face of future disasters that may include gigantic seawalls. The coastal people of Japan are mostly seafaring folk who generally live in a very close relationship with the beauty and danger of the ocean. I suspect that large seawalls that block the view and the pulse of the tides will not be a popular solution. One idea is to convert these low lying residential areas into business and agricultural uses. This type of land use plan would probably facilitate evacuation and damage would probably be less costly if special construction guidelines are followed. However, no permanent rebuilding had started by May of this year in the two towns we saw.

I have one final neat story that we heard while we were in Japan last spring. I originally wrote this with only the information I had from memory, but I went online and found an article from the Japan Times that gave a lot of detail so I am rewriting the story here. In the coastal city of Kamaishi, Iwate there are 14 schools with a total of 2900 students. Three of these schools are in eastern Kamaishi down in the flood plain near the ocean. At Kamaishi East Junior High School, which is one of those three schools, the kids who heard the tsunami alarm go off while they were preparing to join their after school club activities, started to congregate on the field next to the school according to the plan. Power was out so that the loud speaker used to direct their evacuation activity was useless. They knew that the earthquake they had felt a few minutes before was an unusually large one. In nearby Unosumai Elementary School, the teachers had followed the plan to get all the students to the third floor of the building. The teachers watching the Junior High students next door saw that the students had quickly decided to follow their evacuation plan and elementary school teachers sent their young charges back down the stairs to join the older students as they had quickly started to move out. One Junior High student noted that she was not convinced that there would be a tsunami but after feeling the

quake "knew that she should follow the plan and leave immediately". Within minutes of the alarm and without further direction, there were about 560 students (about 250 of them Junior High students) very quickly making their way to the approved evacuation point that was one kilometer up the hill from the school. Once they reached this point they found an older lady there who told them that a cliff face near that spot had collapsed in the violent quake. In all the earthquakes she had experience there, this had never happened before. She felt that a very large tsunami would be coming soon. After only a brief discussion they all decided to move up higher on the side of the mountain. A group of older students formed below the rest of the group and made sure that all of the kids and the other people who had joined them were able to reach the second area. When they reached this place they turned and saw cars crashing into their schools in front of a monster wave that was moving up the valley. They again went higher making sure that the whole group of children and adults came with them. One Junior High student related that this third evacuation in the face of the approaching wave had some running and screaming involved. It was noted later that the first evacuation point along with all three of the school buildings were completely inundated by the tsunami covering well above the third floor. A car was later found on the roof of the three story elementary school. That first huge wave came very near to the second evacuation point, but by that time, all the people were safe at the third point.

There are several documented cases where teachers at other schools along the coast told their students to stay put and climb to the 3rd floor of their very solidly built school only to perish in the huge wave. Of the 2900 students in Kamaishi only 5 died. The clever Junior High kids knew that they must head for the hills to a safe spot up the valley above the town. As night approached on the day of the disaster and it got to be bitterly cold this group of students walked back toward town to another intact school on the hill and moved into the cold dark gym to deal with their first night of many more in an ordeal that is still continuing for some of the people of Kamaishi. These students were finally reunited with surviving family members in the next few days.

One reason that these students were prepared to act on their own was that the Iwate school district had started a program, three years before, that targeted schools in danger zones. This was a program to make sure that students received special training that included awareness and planning. In their history classes they learned of past disasters in their

community, in their social classes they talked to older people in the community about these disasters, and a number of students in their science classes mapped out zones in their city that were at risk and zones that were safe depending on the level of disaster.

Later when the media tried to single out some of the older kids as heroes they rejected such a notion and said that they were simply following their training, the plan and had used basic common sense.

Another article in the Japan Times written in 2012 a year after the disaster noted that the skeletons of three schools in Kamaishi will soon be demolished and that there are still large piles of debris in the school yards. The displaced students are attending schools nearby that were spared but they are missing the special feelings of having their own places and being with their old school mates. Some kids and adults continue to experience nightmares. However, many of the people are dealing with these ghosts in a brighter spirit of hope that is characteristic of the Tohoku people of northern Japan especially those who live along the coast there. And many of the people in the region continue to provide support for those still in need (these days mostly emotional and spiritual support). I admire these resilient and humorous people very much and Ryoko and I consider ourselves "one of them". Of course Ryoko was born in Tohoku and really is one of them!

Note: I have a story on the Daiichi nuclear plant that I have revised several times during the past year that is available to anyone who is interested. However, for me, this story of the disaster you've just read is the real story of the people, not the Daiichi story.