FEATURE ARTIC Fred Opperman Retired

Sweat, Tears and Smiles: **Mission to Mexico** with Habitat for Humanity



Fred is wearing the red bandana.

For many years, I have enjoyed working with wood and doing construction projects either on the job or remodeling our various houses. Since I have retired, that interest has been intensified tenfold. At our home here in Bozeman, there was also an outbuilding, 24' x 38'; and within the back third of it, I built a woodworking shop. Of course, any new project was just an excuse to buy another tool, or so the saying goes.



This is a typical home HfH is trying to replace.



Little Mielda in front of her mother's kitchen.

By September 1999, I started to work for Habitat for Humanity ("HfH") of Gallatin Valley. Since then, I have worked on 19 homes, which translates to 17 families (two homes still not completed at present) that have moved out of substandard housing into a brand new home with new appliances. The security and smiles that brings to those many faces is wonderful to see. Those families are now building equity in their new homes and, most important, into their lives.

This winter has been a slow time for our local chapter, with only two homes almost finished, and no families having the required 500 hours of sweat equity at the present to move in. So we slow down to be able to give them the opportunity to put in more hours themselves and less hours for the volunteers like myself.

With this being the case, I was somewhat free. The president of our local Habitat chapter has been going to Las Varas, Mexico, for the past two years to work on what is called a Global Village Project, part of HfH International. He suggested that I sign up with his group and head south to central Mexico. I took him up on it, and off we went, a group of nine: three other couples from Bozeman, a man from Deerfield, IL, and the daughter of the president, who lives in Los Angeles.

Las Varas, a town of about 2,000 people, is about two hours north of Puerto Vallarta and about six miles east of the Pacific Ocean. There is a Habitat for Humanity chapter there, and they have been building or remodeling four to seven homes per year. In Mexico, the homeowner must also own the land for Habitat to help. That is the way it is in many foreign countries, where title of land is hard to come by. Here in the states, the local chapter buys the land and put up the homes.

Habitat builds simple, decent housing. We offer a hand up, not a hand out. All of the families must put in 500 sweat equity hours, have lived in our area for one year, have a steady job and have a modest down payment. In the states, a two-bedroom home will be about 900 square feet, a three-bedroom will go about 1,050 square feet and a four-bedroom runs about 1,150 square (continued on page 18)

feet. In Mexico, the home will be 400 to 500 square feet and have two-three rooms, a living room and maybe two bedrooms; the bathroom may or may not be in the house. The kitchen is almost always outside under a roof and will be open on two to three sides. The homes there are all constructed of brick. The bricks we saw in Las Varas were being made on the outskirts of town. The soil is all red clay in that area and is dug up, mixed with water and a little straw, and laid out in forms to dry in the sun. The bricks are then stacked up to make a kiln of sorts and baked for "x" number of hours.

Our job in Las Varas was to provide the labor. And we labored, in the 80° to 90°+ heat and humidity. It was a shock on the system to come from Montana, where it was winter and low humidity, to the central Mexican coast. While working on the HfH homes in Las Varas, we did not work with any 20th century or later tools, unless you count the plastic buckets we used to haul cement and dirt. The tools were very basic: shovel, pick, stone chisel, small mallet and a spud bar. As stated, we were to provide the labor. Our jobs were to supply the paid bricklayer or mason with the mortar or cement for what he was doing.



Mason building the roof/ceiling, using bricks in an arch form. Notice bow-type braces to support the bricks while the mortar dries.

Roofs are usually a shed-type roof, higher in the front and sloping to the rear. In this area, they use a unique system (at least to me) of "I" (eye) beams spaced about four feet apart running from front to back. Between the beams, bricks are laid that form an arch. A simple, expandable, metal bowlike form is used when laying the bricks. The bricklayer uses three of these forms and just keeps moving the furthest one away to move forward for the next row. This makes for a very strong roof and a very attractive ceiling in the rooms below.



My "techos," showing the bedroom and the arched ceiling of bricks.

We worked on two different houses while there. For the first house, we were mixing and supplying the cement for the roof and for the floors. In the second house, we were somewhat remodeling. This house was built 30 years ago of only brick with no reinforcing concrete corners or foundations. The roof had already been removed, but we had to chip away up to eight courses of bricks down to the tops of the doors and windows. The corners of the house had to be chipped and broken away, and some corners of the interior walls also had to be broken away and dug underneath for a foundation of cement to be poured extending under the present walls.

The second house was going to be raised about five feet, thus concrete reinforcement was needed in the corners and over the doors and windows to support the added weight. Wire/rod cages with rebar inserted inside were put into the corners and over the doors and windows, forms were installed around them and cement poured into the forms. All of the mortar and cement were mixed by hand on the ground and hauled to where it was needed in the five-gallon plastic buckets. A couple of those days, we mixed five to six yards of cement or more.



"The Pit" after two-anda-half days of hard work. (L to R) Front row: Dick Rohn, Jessica & Ann Drenk. Second row: Joyce Grover, Fred Opperman, Stephen Guggenheim. Third row: Dean Drenk, Amanda Cater & Dick Grover.

We spent the most time at the second house, for we also had to dig "The Pit." This was a 1.5 x 1.5 x 2 meter (about 5' x 5' and 6'8" deep) pit for the waste water and sewer from the house. It is not a septic tank and leach field. It is just a pit that will have a concrete pad poured over the top to seal it. Most of the small towns have no sewage disposal lines or systems. The pits are used or the sewage just flows openly away from the house across the ground. This pit took us three days to dig and was hard, hot work. The first day, we could shovel it out of the hole, but by the second day, we had to fill buckets and hand it up to be dumped in various places.



L to R: Joyce Grover, Dona Modesta and Jessica Drenk, in the pit passing a bucket of dirt to be dumped.

I need to add that the women and members of the families labored just as hard or harder than us. The men of the household were off to their jobs and helped only on January 6, the twelfth day of Christmas or "The Kings' Day." On this day, the two families got together and put on a typical Mexican meal for us after work. They served us tamales, sweet bread/cake, chocolate cake, hot chocolate and watermelon. They also had a piñata, and the children and some of our group had their turns at it. The Mexican families were so appreciative of our help and support. Everyday they would have some fresh fruit or other food or drink to pass around when we were working.

The towns have a central water system going to the homes, but I noticed that all of the residents seem to buy bottled water from the vendors that were constantly driving up and down the streets. The water that came out of the tap was used mostly for bathing or for their gardens. Everyone seemed to have propane to cook with, along with an area for a natural wood fire for cooking. No natural gas. Very minimal electricity to most homes and many still with no service. Also no garbage pickup and very few telephones.

We worked in Las Varas but stayed in Chacala, a small fishing village of about 300, six miles west on the Pacific coast. Seven of our group staved in a very nice B & B, and all of our meals were eaten there. The other single man and I stayed about three blocks away in what is called a "techos," a small house that HfH and the Mexican government started as a way for families to improve their housing and income. They build a two-story house; the homeowner lives on the first floor, and the second floor is rented out, and contains a bedroom, bathroom and shower. The deck has a roof that protects you from the weather and serves as a relaxing dining-and-kitchen area. Provided was a refrigerator, hot plate, dishes, pots and pans and utensils. It was quite nice and very clean, up on a hill with good views of the ocean, which was about a block away.



The library (biblioteca) and primary school in Chacala, Mexico.

We had a schedule of working two days for HfH, then having a day off. On the days off and on some other days after work, most of us also did some work on the biblioteca, or library, in Chacala. That is when we discovered how poor the electrical system is in Mexico. An old gradeschool building had only one 15-amp service to run all the lights, the various outlets and five computers! We also discovered that the electrical systems were not grounded when we were washing down the walls in preparation to paint. One lady got a mild tingle or shock when the water ran past a switch. We decided it would be a good idea to buy a ground rod and ground the system for them. We also installed new gates at the library, which required more chipping away of bricks and concrete plus mixing new cement and forms to attach the new 6' x 6' gates.

Chacala had been hit extremely hard by Hurricane Kenna on October 24, 2002, with Force IV winds of 135 mph and three 20- to 25-foot tidal waves hitting within a 35-minute period. Fortunately, the town had a 30minute warning, and everyone escaped to higher ground with no loss of life. Homes and businesses along the beach, however, were not so fortunate, and fishermen lost 30 boats, including all gear and nets. The library was spared from the ravages of the hurricane and served as the disaster relief center for days following the storm.

Even though we didn't finish a home that anyone could move into, we took steps in the direction of providing a better home and family life for those two families. One little girl cried as we were leaving, for she had become quite attached to one of the women in our group. It was a good feeling to help these families who are trying to improve their lives. They have so little, yet they all seem to be happy and so involved with one another.

The morning of the last day before we left, we hired a guide and hiked through various fruit plantations and jungle to Altavista, an area that has more than 2,000 petroglyphs etched on all sizes of rocks and boulders that pre-date the Mayan civilization.



A couple of the petroglyphs at Altavista, Mexico.

In the afternoon, we sat in on a meeting at the library in Chacala to hear 11 "scholarship students" relate what they would like to do with their lives. A translator was present for us and for them as we, in turn, described what we did in our own lives and the jobs we held in order to show the opportunities available to them with an education. Since government financial support ends with the sixth grade, education beyond that point is funded by the families, private donors or groups such as the U.S. Rotary Clubs. Those 11 students were being sponsored by Montana Rotary Clubs.



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