

God's Jig Saw Puzzle Pieces

One of my strategies for the great Colorado experiment was to get to know the mountains as a volunteer and give something to the community. I also wanted to interact with locals and gain a better understanding of the people, why they live here, how they invest their time, how they feel about newcomers and local culture. I also wanted to learn things only locals can tell you like, local weather microclimates, where to eat, where to place your house on a lot, etc.

After some research I decided to volunteer with the Colorado State Forest. My first volunteer day was working with a small group doing trail maintenance on a put and take fishing pond with a wheelchair accessible trail circling the lake. Mostly we were raking the trail and leveling portions that would cause wheelchairs problems.

The crew consisted of a local county engineer and several forestry students from the University. The crew verified the fact that working for the forest service is a labor of love. Compensation is below pitiful even for folks with master's degrees. Jobs are hard to come by due to lack of funding, but even with scarce jobs and low pay, forest people seem to love their jobs. It was a fun first volunteer day.

Since then I have been hiking a lot and have come to appreciate trail rock work. There is something really beautiful about rocks placed in a fashion to provide steps, divert water and gently guide people along the trail. Trail rocks look as though they were placed by the hand of God yet they have been placed for a purpose by a human. To me the best rock work goes undetected just melding into the mountain. It is only when the microscope is turned on that you start to see a very deliberate beautiful often intricate structure, form and purpose to the work.

Being a ham fisted spatially unaware third grader I found it impossible to place the yellow moon shaped plastic piece in the moon shaped cut out leaving force as my strategy of choice. As a ham fisted spatially unaware college student my UPS career was stymied by the inability to load boxes efficiently in semi trailers. As a ham fisted and spatially unaware adult I have never ever completed a jig saw puzzle. With that weakness, I was eager to learn how this beautiful mountain trail rock work is created.

On Saturday September 22nd I got my chance. My second volunteer day took place outside Conifer Co. on a trail in a homeowners association. Part of the Colorado State Forest Service mission is to work with private land owners to preserve the forest. To that end the Forest Service has been working on a piece of land within the homeowners association that will serve to demonstrate state of the art fire mitigation techniques and planning. This particular neighborhood has been plagued with fires over the years so the prospect of using part of their land as an example of state of the art fire mitigation was well received.

One of the reason fires have been getting out of control is because the forest are overgrown providing excess fuel. Through a combination of well intended but ill advised forest management, and natural causes, forest are choked with trees. In this case, Ponderosa pine and Doug firs are especially abundant.

In order to thin the forest a machine has been devised. The machine is called the "Masticator" It is self propelled and can climb a 40 degree angle with a boom attached to a huge circular saw. The operator raises the massive blade over a tree and then lowers the blade over the tree like a lawn mower causing the tree to spontaneously and instantaneously disintegrate into a mist of chips. In a matter of seconds trees are eliminated from the earth. Sort of like what happened when I had the family on an airboat ride in the everglades. Our guide pointed out and brought to our specific attention a beautiful exotic bird; when to everyone's shock and awe; the bird flew into the airboat propeller. The bird was instantaneously vaporized just like the trees, minus wood chips. But that is another story for another day.

After a visit from the masticator a few years ago, the forest is thinned, natural grasses have returned and the remaining trees look healthy. Ryan our Colorado State forester is happy.

Today's volunteer assignment is to build steps and a water diversion. An important trail strategy is to avoid erosion. Trails are considered "sacrificial" zones where it is acknowledge nothing will grow. But outside the trail is protected and clearly off limits. The eco system is fragile being vulnerable to folks cutting the trail short and erosion from misdirected water. Water runs down trail and if not dispersed properly builds up force and creates terrible erosion that otherwise would not happen had there not been a trail.

Effective water diversions should be built pretty much perpendicular to the trail thus blocking water flow, directing water off the trail and then dispersing water smoothly off trail. Building an effective water diversion was my afternoons challenge.

But first I was going to spend the morning collecting rocks for Jack a 33 year park service veteran and Ryan our Colorado State Forester. They were building a combination of steps and a water diversion. This is my learning opportunity. Jack focused on building steps on a 90 degree turn while Ryan built the water diversion.

It was a pleasure picking out "treads" for Jack, listening and learning from a true veteran of the Park Service. Jack was raised in Yosemite, joined the park service and has served at some of the most beautiful parks in the west including Yellowstone, Bryce, Yosemite and many others.

He demonstrated how to place treads and stones so the water would run off sort of like roof shingles. He also showed me how to collect and move rocks using gravity to do the hard work. We worked together all morning. I hauled rock while Ryan and Jack did the skill work.

We broke for a barbeque lunch brought in from Hog Heaven by one of the volunteer's wives. Lunch was a picnic in the park accompanied by the energy of a group of people with diverse backgrounds all committed to the common goal of making their forest better. Our work group consisted of a

couple who owned a landscape company, a software engineer, a house remodeler, Jack the 33 year Park Service veteran, a retired Coors executive, Ryan our state forester and me. They were most helpful and put up with my questions regarding climate etc.

After lunch we hiked back up the mountain trail to start our afternoons work. I was assigned to build a water diversion. I could not wait. This is precisely what I wanted to do.

Sue the wife of another volunteer located a piece of rock in the trail that looked like it would make a good anchor. A perpendicular anchor rock provides stability for additional rocks that will have to withstand water pressure coming down the trail. Jack reviewed the site, gave his approval and let me loose.

One thing I noticed in the morning work session was the tendency for people to work alone. At first I did not understand why. But I would soon gain insight and understanding as to why some people enjoy working alone so much.

After working about an hour or so I started to understand. This work reflects your soul. The work is nothing less than art using the mother earth's natural materials. A peace came over me as I looked for rocks to provide "treads" and other important pieces that became foundational to my little legacy. My work is going to be here a very long time and will be visited by untold visitors. No one will know who created the work but that makes the work even more special.

The water diversion started coming together. Using a pick axe and shovel I dug out around the rock creating spaces for the additional perpendicular rocks. I located a couple "treads" and used gravity to haul them down the mountain to my site. The project started looking pretty good so I asked Jack to take a look. Nope not yet, the diversion and steps would not work.

Some of the rocks were sticking up too high and the length between steps was too long. We are trying to build steps and water diversions that are almost invisible to hikers. Not that we are trying to camouflage them, but

the steps and water diversion should flow and integrate into the trail. Hiking should be smooth and natural. My diversion might trip someone. My ham fisted, spatial awareness deficit was showing up.

I went back to the drawing board, pulled out stones and started over. Stones were replaced, treads were moved and dirt relocated. Time flew by. I was in the woods on a perfect Colorado autumn day surrounded by beautiful gold aspen leaves and wonderful caring people making a contribution by building something that would last a very very long time. This was my project; my soul is in the rock. I now understand why folks like to do this work on their own.

Earlier in the day Jack told me, he said "Bruce, there comes a time when you just have to walk away and consider it finished. Like most artist Jack is never totally satisfied with his work but the practical side takes over and there comes a time to walk away. After working most of the afternoon, I had come to that point. I asked Jack to critique my work. He was satisfied. I was satisfied. Another wonderful day in Colorado.



Bruce's water diversion with steps.



Jack's steps on a 90 degree turn with a water diversion