



trapped into packs filled with camping gear for a week at 8,000 ft. above sea level, a new altitude for sever-

al of us, we waited in the Boulder bus station for the man behind the Handmade Film Institute. Several odd looking, potential chemistry geniuses went by but none were the real deal until a curly haired man resembling Gene Wilder (circa Willy Wonka) came up and said, "You look like a bunch of filmmakers," and we were.

Three cars drove the nine of us up the mountains through small Colorado towns and finally along a bumpy dirt road to the home of Robert Schaller, our instructor, Cynthia Sliker, our gourmet chef, and Marcus, their amazing 3 1/2 year old. This would be our home for the week of handmade film camp. My reasons for being there were manifold: camping in the Rockies with a fully plumbed bathroom nearby, the three incredible gourmet vegan meals per day, and of course seeing the beautiful solar powered house they lived in made the trip especially worthwhile.

The Handmade Film Institute is the brainchild of Robert Schaller, a faculty member at the University of Colorado in Boulder, where he developed a class called "The Physical Properties of Film." Robert, as I learned throughout the week, is one of those geniustype folks who can do quick, yet complicated, math in his head. He's easily distractible, but can jump from one topic to the next without missing a beat. A true Renaissance man, he studied music composition, and the Classics before landing in film.

Knowing only that this was a 'handmade' film camp, and we were going to be shooting films without using cameras, I had very little idea of what I was getting into. A pre-camp questionnaire asking questions regarding the properties of light waves and the inventor of the thermometer didn't do much to prepare me either. Then I met my group of 8, the maximum the camp can sustain. We were from New York City, San Francisco, Miami, Fargo, Japan, Chile (via Canada) and Denver. We were students, philosophers, teachers, and unemployed boat dwellers. None of us had a clue

what to expect, but we were all very excited.

After a mountainside scout, I set up my tent, which I'm sure I did wrong. The Rocky Mountains turned out to be very rocky and my tent stakes would not go in. But, anyway, there was dinner to look forward to, and I was not disappointed; vegan never tasted so good.

Following some incredible dessert and a nightly round of wine, we stretched into the 'meadow' for the evening's screening. Robert showed us two of his films, one of his son, (Marcus the super genius) shot with a homemade 16mm pinhole camera. We then watched several of Stan Brakhage's films from Robert's personal collection. Stan, as he was casually called, was a great friend and mentor to Robert and others of our guest artists from Colorado.

One evening we were joined by Andy Bresi, a current grad student and experimental filmmaker at UC Boulder, who showed us a few of his films that employed toning, reticulation, and other processes considered somewhat secret.

Our last guest artist was the largest man in the room, Phil Solomon. Phil's not a large man physically but he can sure command a room. Cozied up in the living room on a cold evening, Stan showed us several of his 16mm prints including my first viewing of the gorgeous film, Snow Man. Unfortunately for Phil, we were a wornout bunch as that afternoon we hiked several miles through the mountains to see the sites and to shoot film. A rainstorm ran us off the mountain and into the visionary world Phil brought to us. We spoke only of the why's and never of his how's; Phil led discussions late into the night on all topics. A note to anyone who might be at a Q&A with Phil, never ask, "How'd you do that?" The answer won't be nearly as interesting as asking, "Why did you do that?"

About half of our week was spent in chemistry class. My brain had to get out the flashlight and dig through files so long ignored they were nearly irretrievable. We were taught the make up of atoms, ions, isotopes, and — Robert's best friend and only rival to his love of wife and child — the Periodic Table. To his credit I've never understood chemistry before, yet Robert's teaching method makes it quite clear. If, after a lesson we still didn't understand a concept he would just start singing until we did.

We spent most of our time in the dark room, utilizing all the chemistry knowledge we'd acquired. We processed color negative, black and white reversal, Hi-con... We crossprocessed, and made our own emulsion. We contact printed and were taught how to rescue 32-year- old film whose emulsion was literally falling off its backing. One mildly claustrophobic classmate sat in the corner and read out the recipe steps as we mixed developers. He was affectionately dubbed Recipe Cat. Combinations of elements had to be weighed and poured, sometimes while wearing a respirator and goggles, into big buckets of water and chemicals. The shared white lab coat was traded off

and our every move was recorded in the lab book that tracked each step.

We made pinhole Super-8 cameras, which was much easier than I had thought. The process began with a film cartridge, a small sewing needle, a cheap pen, a lighter, black camera tape and a piece of tin - ours was a cut-out from a pop can. Very gingerly we made the tiniest hole possible in the piece of can about an inch square that was just big enough to fit over the film field of the cartridge. Then we taped the tin to the cartridge so that hole was in front of a film frame, and taped out any possible light leaks. Next we used the lighter to melt the plastic casing of the pen. This became our crank handle, so we melted the plastic in opposing 90degree angles at each end of the pen casing, with the result that it looked like a straightened out Z. Then we lit one end of the crank on fire and shoved it into the cartridge where it engages with the camera to move the

film. Once the crank was melted into the cartridge we were done. For good measure I wrote on my cartridge which way to turn as it won't really allow for turning the opposite direction.

Shooting with the pinholes was a whole other experience. There was a mathematical equation to determine the length of exposure for each frame. Shooting 100ASA film required we crank at 1/48second, which is nearly impossible, so we taped ND3 filters to the tin hole and shot at about a frame per second, remembering to crank the whole 50' cartridge, and only move them when cranking so there wasn't blur during the exposures. It was really funny-looking — all these people with various pens melted into film cartridges trying to crank at a specific rate.

Back in the dark room we shared three hammers and a cement flor to smash our cartridges and retrieve the exposed film. Several fingers were damaged in this process. When the 8 fifty foot pieces of film processed we turned on the lights to

find a giant dreadlock of film to untangle before hang up to dry. Our final results were a mixed bag of flashing lights and phantom images. During the screening the soundtrack was "is that a tree? I shot trees!" I have to admit part of the image recognition issue was the wrongly oriented film on its reel, rendering the image upside down — oops!

The actrivity I participated in was the shooting of everyone's face on Hicon, which we processed and contact printed to a positive print. It looked beautiful. With a week of intensive science class, filmmaking, and mage exploration behind us the Recipe Cat and I drove back down that bumpy dirt road. Back to my Brooklyn life where the food isn't all plant based, and the ground isn't full of rocks, but the hand processing will prevail now that I actually know what I'm doing, thanks to Robert, Cynthia, Marcus and my co-campers at the Handmade Film Institute.



Megan Hessenthaler is a trumpet playing, boat dwelling, experimental filmmaker who lives with a handsome cat and dimpled hobbit in a dirty canal in Brooklyn, NY.