

Abstract

ROBERTS, JASON STEADMAN. "The Rich Go Higher": The Political Ecology of Forestry, Fire, and the Wildland-urban Interface in Northern Utah. (Under the Direction of Dr. Jerry Jacka).

In the years following the National Fire Plan and the Healthy Forests Restoration Act, mechanical fuels reduction has become an accepted and favored fire management practice in interface communities as public funds have become available to subsidize the protection of private lands. However, based on ethnographic fieldwork, it is apparent that fuels reduction in these areas is often constrained by a tension between aesthetics and functionality that precludes the complete accomplishment of management objectives. The allocation and use of public funds in private, primarily affluent communities therefore reveals sharp socioeconomic differences in both accessibility to and control of nature. The wildland-urban interface is yet another example of the ways in which powerful, political economic interests actively define nature for the purposes of production and consumption.

In this thesis, I explore the current state of fire management in the wildland-urban interface through participant observation while working on a brush removal crew for the state of Utah. I argue that the members of the brush removal crew, while seemingly working to mitigate fire hazards in the wildland-urban interface; are often engaged in the maintenance of social hierarchy through paid conformance with the preservationist wilderness ethic of the interface residents.

“The Rich Go Higher”: The Political Ecology of Forestry, Fire, and the Wildland-urban
Interface in Northern Utah

by
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Dedication

To all the fellas on the 2008 Red Mountain Brush Crew: Chunk, Cymbals, Dan, Diego, Farley, Kadie, Medina, Tim, and TJ. Thanks for teaching me: to be weary of a “one-eyed Cyclops,” the endless uses of the term “englaged,” the nutritional and musical value of “Honey Nut Scooters,” the infinite reasons why I should “fuck my beard,” why “gingers have no souls,” the finer points of socialist anarchy, why Dan should never be allowed to hold a football or cook breakfast or load a chipper, the importance of never playing cards on credit, the particular methods of avoiding “swamp ass,” the difference between Swisher Sweets cigarillos and regular cigarettes, the delicious sandwich that is “The Monte Cristo,” that the average of 40 and 60 is not always 50, what constitutes “a glorified landscaping crew,” the thrill of “dominoing” trees, the multiple uses of “Salsa Del Sol,” the flavorful hydrating qualities of “Moon Tablets,” the difference between chew and chew, that the best part of waking up really is “Western Family” instant coffee in your cup or nose, the indispensability of “Shop Towels,” the importance of not nicking your “shainshaw shaps,” and for generally making a season of hard work more fun than it probably ever should have been. It’s your Mom, now come give us a hug.



Biography

I am a simple man with simple tastes. I like long walks on the beach, candlelit dinners, and smooth jazz.

Acknowledgements

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Chapter 1

“The Rich Go Higher”: The Political Ecology of Forestry, Fire, and the Wildland-urban Interface in Northern Utah

Introduction

“That’s where the filthy rich live, on that side of the wall. You can’t even see the houses for the forest. There’s a house over there that’s like 68,000 [square] feet man.” – Medina

“I think log houses annoy me the most of anything out here [in the WUI]. It’s like yeah, you’re real fuckin’ rustic with your gas range and your fuckin’ plasma tvs and shit.” – Cymbals

We ate our bagged lunches along the freshly paved, two-lane road leading up the mountain to “The Colony,” a private, gated, skiing community in Park City, Utah. We were taking our lunch break in a muddy area near a drainage culvert between the road and the snowy, steep grade stand of blown over aspen and small firs in which we had been working that morning to protect the community from wildfire by removing “hazardous” fuels. The juxtaposition of laborers in hardhats and work clothes to the business-casual, community residents driving by in their new SUVs, trucks, and Mercedes could not have been more dramatic. In between bites of a bologna and cheese sandwich Rat Face asked, “Where are all the homes?” Medina dragged hard on his Camel cigarette, exhaled, and then casually replied, “They’re up at the top of the mountain...the rich go higher.”

Park City is about a thirty-minute northeasterly drive along I-80 from Salt Lake City. The drive to Park City takes one along a slow, winding ascent into the mountains to nearby skiing and outdoor recreation areas. Narrow canyons with reddish-pinkish, rocky soil,

abundant sagebrush, serviceberry, and gambel oak initially surround the traveler on his or her way to Park City. It is an incredibly dry, often flammable, desert landscape consisting of numerous, rock-shorn peaks and sparse valleys. The only significant developments in the area are the occasional large, dusty mineral mines that are visible from the highway. Urban sprawl seems to have leapfrogged this location, only leaving the highway behind to connect Park City to Salt Lake. It is, admittedly, a hard and uninviting landscape.

The view changes as the elevation increases, however. The temperature drops ten degrees or more due to this change in altitude. The vegetation becomes a much greener mix of conifers such as lodgepole pine, subalpine fir, and engelmann spruce as well as deciduous species like aspen. The soil and rock is now dark gray in color and snow is visible at the top of the mountains. The scenic views must be what have inspired so much human settlement and development out here. Small communities such as Parley's Summit reveal brick, stucco, and log homes of various earth tones located at the foot of the hills, behind the large, granite walls that line the freeway. These are precursors to the upcoming city. Human development continues to increase, becoming much denser as one approaches Park City and its various residential and commercial enclaves. I do not know whether to describe the area as urban, suburban, or rural, as the density of development connotes a city atmosphere; however the style of the houses and commercial buildings gives a simulated sense of rustic, rural charm. The homes in this area are predominantly made in one of two styles – those with sharply angular, modernist architecture, or the more abundant golden log cabins with hunter green,

metal roofs. The cabins are designed with a sort of artificial ageing that exemplifies the same contradictions between old time values and contemporary luxuries as the rest of the city.

The homes become far bigger, more spread out, and more valuable as you climb the mountain. The transition starts with small, attractive, new homes and condominiums packed tightly together at the bottom of the mountain and ends with behemoth estates spreading their immense square footage across spacious, mountaintop lots. As my roommate explained to me after our first job in Park City, “Yeah, well anything in that place...is going to be expensive. The real-estate values up there are crazy; every ten blocks up the prices go up like \$50,000. The way real estate is in Utah, the most valuable properties either have a view of the mountain or the valley. *It’s like all the rich people want to be able to look down on the poor people.* People in this state introduce themselves by asking what part of the valley are you from? – To see whether you have money or not.”

Most of the buildings in Park City try to capture a certain woodsy, log cabin quality, with many of the structures made of beautiful, golden pine logs – the houses, shopping centers, signs, even the car wash. This woodsy, rural flavor to Park City attempts to portray these recently developed locales as anything but developed. Even the Mountain Dew machine at the local plant nursery has a picture of a waterfall pasted on the front. It is an interesting scene, but as Farley and Chunk’s discussion illustrates, they are not really fooling anyone: “Are those log homes? Because they look plastic, they’re so shiny.” “Yeah, my grandfather has a *real* cabin, it doesn’t look like that.” Similar to Blakely and Snyder’s discussion of the history of the suburbs, the creators of Park City have done “everything they

could to dissociate their developments from the city” (1997: 14). Subdivisions in this region have nature inspired names like: “Jeremy Ranch,” “Bear Hollow Village,” “Deer Park,” “Red Pine Adventures,” “White Pine,” “Cutter Lane,” and “The Canyons.” The names are “meant to conjure up bucolic rural imagery and only coincidentally to reflect the actual landscape” (Blakely and Snyder 1997:14). It is as if we have wandered into a nature theme park - an aesthetically inspired caricature of what the rural experience must have been like long ago. As Cymbals said when we pulled up in sight of an old-style wooden fence surrounding a grassy field in The Colony, “Fuckin’ rich people man, gotta fuckin’ put up a fuckin’ fake fence to make it look like they’re in the country even though everybody knows they’re fuckin’ rich.” This area in and around Park City has all of the charm and scenic beauty of a backwoods-hunting lodge with none of the associated inconveniences. This is urbanity’s wilderness, exurbia. This is the wildland-urban interface; a concept developed in federal wildfire management circles to reflect the problematic relationship between “wildfire” and human development on recently undeveloped lands. It is a “produced space” (Smith 1996), one that reflects the political, economic, and cultural values embedded in the practices and ideas of its producers. The vagueness of this concept in both location and definition in federal policies, as well as its obvious cultural and material production, prompted me to jump at the chance to study it through the eyes of a seasonal laborer in the wildland fire workforce. It was the reason for my presence in The Colony, a community whose name and features wittingly or unwittingly connote a sense of imperialism.

Residents have their own ski lifts and slopes in The Colony and much of Park City; you can see them from the bottom of the mountain. Unfortunately, this was not a recreational outing. The members of the Burro Mountain Fuels Crew and the Red Mountain Brush Crew had gathered there to complete the field practicum portion of the National Wildfire Coordinating Group's Wildland Fire Chainsaws course (S-212). The National Wildfire Coordinating Group is the federal organization responsible for organizing, systematizing, and institutionalizing state and federal knowledges of and approaches to wildland fire. As such, S-212 is a required introductory course for any individual seeking employment in the field of wildland fire.

Most of us were new employees of the Utah division of Forestry, Fire, and State Lands, working for the Red Mountain Conservation Center (RMCC) located in Jasper, Utah. The objectives of the operation were fairly simple. We were going to spend two days working in The Colony to gain experience running chainsaws in order to receive certification as Class A "fallers." After this experience we would be qualified to fall any tree less than, or equal to, eight inches in diameter [dbh¹]. Not only would we be gaining valuable experience on the saw, we would also be providing a valuable service to the whole Colony community according to Wayne, our lead chainsaw instructor. This practical chainsaw experience would be gained by removing the dead and downed aspen fuel on the aforementioned hill. Our novice status meant that these services were provided to The Colony free of charge.

¹ Diameter of a tree when measured at breast height

This was my first real introduction to the work involved in what the organization called “brush disposal” or “hazardous fuels reduction.” My previous week and a half on the job had been spent in the classroom with the rest of the crewmembers learning about wood chippers, chainsaws, basic first aid, CPR, and organizational standard operating procedures. Now I found myself teamed up with Farley as part of a sawyer, swamper saw team. Farley was a twenty-four year old former bridge worker from Idaho. He had moved down to Utah because he and his wife hated the Idaho winters. Farley wanted to try his hand as a wildland firefighter and a season of brush crew work was going to be his mode of entry into firefighting. Farley was a round man with a chubby, baby face and ear length red hair. He was an altogether jolly looking fellow with an almost constant smile on his face. He had been given the nickname Farley for his vague resemblance to the late actor/comedian Chris Farley. Our instructor for this portion of the course was one of the lead sawyers for the Kings Mountain Initial Attack Fire Crew. He was a short, muscular guy in his late twenties. He had buzzed cut hair, a constable style mustache-beard, large silver gauge earrings, and a special affinity for Marlboro Light cigarettes. He wore a bright yellow Nomex fire shirt, green Nomex fire pants, green chainsaw chaps, and a green bandanna under a white hardhat. He told us his real name at some point but I subsequently forgot. I can only remember him as the name he gave a reporter doing a story on a California fire on which he had been working: Don Keydick.

It was a cold, snowy day in early May and Farley and I were working along a forty degree slope of mostly pole-sized² aspen trees. It was not an ideal situation for gaining experience on a chainsaw, but as Wayne had said in class “you never have an ideal situation.” Farley started out as the sawyer while I took my turn as his swamper. The sawyer is the person who runs the saw. The swamper is basically the sawyer’s assistant. He or she is responsible for carrying the saw fuel, bar oil, tools for the saw, and removing and piling everything the sawyer cuts. Swamping is probably a more difficult job than sawing, especially once you get used to running a saw. Working in these conditions made me keenly aware of this fact. I found it impossible to keep up with Farley’s sawing as I attempted to pile and drag all the freshly cut debris down to the road where I placed it in a larger pile to await chipping. The hill was wet with snow and the footing was terrible. It only got worse as I kept slipping my way up and down the hill. By the time Farley had run through his tank of gas, and it was time to switch positions, I found myself standing beside him and Don softly panting while I told them “man, I thought I was in better shape than this.”

I took the chainsaw and started it up for the first time in my life. Then Don supervised me while I began bucking up a downed aspen log, essentially cutting it up into smaller pieces. Bucking proved to be more difficult than I had anticipated. I constantly had to be aware of the placement of the log on the hill and the compression and tension this could put on the log. I soon learned the frustration of finding myself “bound up” in a log, as the combination of my sawing and the tension being placed on the log had caused it to swallow

² Small, pulpwood timber typically somewhere between four to eight inches in diameter [dbh].

the bar and chain. With Don's help I was eventually able to free the saw from the log and move on to falling trees.

Felling a tree is more complex than one might think. You must first start by "sizing up the situation" to determine tree lean, "escape routes," and any "overhead hazards." One must also be conscious of "*non-natural hazards*" such as "people and structures" that might happen to be in or around the work area. As Wayne said "we don't want logs rolling into mansions." It was my first attempt at the three step, conventional cutting method. I started by yelling "face cut" to alert everyone in the vicinity that I was going to be falling a tree. I then made a straight face cut about a third of the way into the bole of the tree. This was followed by a slant cut which connected with the face cut to remove a wedge of wood from the face of the tree. I then yelled, "Back cut" before completing the final step in the process. I started at the back of the tree, a few inches above the face cut, cutting back toward the wedge until the tree began to give way, being careful to maintain enough "holding wood" as a hinge to "control the fall." It was a fairly successful fall. I had been able to drop the tree around the spot where I had wanted. Don was quick to tell me "hey, that was good but you need to cut a little slower. It'll give you more control of the fall. You also really need to concentrate on calling out louder, looking up, and escaping the tree." I had never really thought about the possibility of being able to control how and where a tree fell, but I would soon learn that this ability to direct and indeed control nature was fundamental to the mentality and the objectives of wildland fire and fuels mitigation work.

The next day Farley and I continued our training, learning how to better control the saw and the trees with which we were working. At the end of our second day Don said, “You guys have improved significantly from this time yesterday. You both did well; I passed you no restrictions. All you guys really need is some more *trigger time*.”

Don, Farley, and I made our way down the hill and back to the asphalt road leading up the mountain. Here, we met up with the other saw teams and instructors and together we all walked back to the big, red crew buggies in a single file, “professional” line carrying our saws and dolmars³ with us. The whole group then stood in a circle on the newly paved black, asphalt parking area for an “After Action Review (AAR)” led by Wayne. Wayne started the review, in a somewhat paternalistic, pedantic manner, by asking us all questions like: “what did we do?” “What was planned?” “What went right?” “What went wrong?” We then responded to him with equally infantile answers: “we cut down trees,” “we planned to cut down trees,” “nobody got hurt,” “we got bound up a few times.” Wayne then reemphasized certain points of interest such as “Situational Awareness (SA),” “Personal Protective Equipment (PPE),” and the need to learn through experience. Wayne capped the review saying, “I hope you guys enjoyed this class as much as we enjoyed teaching it and that you can take all of the information that you learned out here and in the class and apply it to work in the field.”

The whole chainsaw training process in The Colony alerted me to the numerous similarities between wildland fire management and military operations (Pyne 1981).

³ A red, plastic bottle divided into two sections that are used to carry two-stroke engine mix and chainsaw bar oil.

Everything was driven by a sense of order and masculinity. It reminded me of the advice I had received from a North Carolina wildland fire contact before leaving for Utah:

“remember, firefighting is war.” Indeed, if this was not “The Moral Equivalent of War” to which William James (1995) referred, then it was doubtful that such an equivalent ever existed. Our almost exclusively male crews⁴ were engaged in a gendered battle to mechanize a disorderly and potentially hazardous nature (Merchant 1979). It would necessarily require hard work, discipline, and organization to defeat our enemy.

A vast structural hierarchy within each fire crew insured these tenets of hard work, discipline, and organization. The crew leader was the highest authority on each crew, often followed by an assistant crew leader. The crews were further broken into two or three squads, each with their own squad bosses and similar, lower functionaries known as lead crewmembers. There were four to five general firefighters that made up the rest of each squad for a total of twenty to twenty-one crewmembers. There was also an additional hierarchy even within the ranks of the general firefighters. As Steve, an engine crew squad boss explained: “yeah, you know you have your hierarchies on the fire crews... it’s kind of the sawyers, then your swampers, your rhinos⁵, and then your diggers⁶.”

The brush crew hierarchy, however, was not nearly this complex, although it should have been in theory. We rarely used tools other than chainsaws, and beyond that, we simply did not have the manpower necessary for such a level of organization. Tim was the leader of

⁴ There were only four women represented in the ninety member seasonal workforce. Of these four, only two finished their respective seasons on the job. There were no women on the brush crew.

⁵ Crewmembers using a specialized digging tool called a “Rhino.” It is similar to a hoe-shovel.

⁶ Crewmembers using digging tools like pulaskis, shovels, or rakes.

our nine-man crew and the stratification of the rest of our crew eventually became based upon individual work ethic and ability during “trigger time.” Yet, we still maintained the discipline of our field by walking in straight, albeit shorter, lines, setting up tents and equipment in similarly straight lines, and strictly adhering to standard operating procedures. All of these efforts were designed to help us maintain a level of professionalism that would better represent the values of the State of Utah. Regimentation was supposed to control the men and the men were supposed to control an often-feminized nature. This disciplined masculinity of the workplace would become a key theme in my research.

My mind was quickly pulled away from these thoughts of firefighting and the military and back to my surroundings as we loaded onto our respective crew buggies to begin the descent out of The Colony, through Park City, and back to RMCC. As we left The Colony, we passed through a mechanical gate of smoothly cut reddish-pinkish stone columns and darkly stained wooden fencing. We then drove past a similarly constructed, guarded hut. The roof of the hut was fashioned out of a large, stained lodgepole pine tree. There was a model home for prospective buyers located just outside the community fence. It was a large, log cabin made of large, darkly stained logs, white chinking, large, sparkling windows, red and pink stones, and wooden shingles. The home was surrounded by a professionally manicured landscape with bright green grass, a small pond with a water display, natural areas made of rocks and shrubs, and a small, man-made waterfall made of the same smooth, reddish-pinkish stone. There was a big, gray stone sign in front of the model home that read “The Colony” in burgundy lettering. Near this sign were two smaller, metal signs. One sign

communicated the location of the “fire safe zone” with an arrow pointing up the mountain toward The Colony and then located Park City with an arrow pointing down the mountain, subconsciously noting that Park City was not a “fire safe zone.” The other sign symbolized what I would soon become very familiar with during my season of brush crew work. It represented the superior power of the upper classes to control and privatize access and use of landscapes and resources. Almost ironically, the sign read “Welcome to The Colony: A Private Community – No Solicitors, No unauthorized Entrance, No Roadside Parking, No Access to Surrounding Recreation, Posted Traffic Regulations Enforced.” It was a warm welcome indeed. Donald Appleyard (1979:31) describes the mechanisms by which these kinds of landscapes are legitimated.

The form and structure of our man-made physical environment are, in fact, the product of struggles for power. Those who have political power and wealth have historically manipulated the form of cities and landscapes for their own benefit. They have captured the best places and privatized as much of the environment as they could; they have slowly but relentlessly created hierarchical relationships where they are at the top.

Residents of The Colony, by way of their monetary wealth, had enclosed and consumed a “natural” landscape to conform to the ideals of a culturally valued lifestyle of amenity. This newly formed landscape seemed to emphasize prestige, aesthetics, recreation, security, and exclusivity.

As we continued down the road, observing the sights of The Colony, the fuels crew manager commented, “People with way too much money. They only spend a few weeks to a month a year up here too.” Medina replied, through the hacking coughs of a heavy smoker, “yeah, I used to wash windows up here, there’s a house up there it costs twenty-eight

hundred dollars just to wash the windows. Yeah, and up in Deer Park is where the guy lives that created the debit card.” We continued discussing the affluence of the area as we passed a horse stable and bright green pasture on our way down the road away from The Colony. Cymbals commented, “Those people up here have money to burn. You always see that kind of shit up here.” These and similar comments by my coworkers throughout the course of the season led me to rethink the original thrust of my research. I would soon learn that “no explanation of environmental change is complete...without serious attention to who profits from changes in control over resources, and without exploring who takes what from whom” (Robbins 2004:52). Consequently, no longer would I simply be interested in where and what the wildland-urban interface was, I was now thoroughly concerned with its deeper meaning - who it benefited, who it excluded, and why?

It took me a while to arrive at this final research interest. Some of it was developed through theory, some through analysis, but most of it was just dumb luck. By studying the structures of power underlying the production of the wildland-urban interface, I was once again “confirming the old saw that ethnographers end up studying whatever their hosts want to talk about” (Metcalf 2002:32). In the process, however, I had stumbled upon a much more interesting and important topic of study.

Developing Research Interests

I had initially aimed for this project to be an in-depth study of wildland firefighting and how the act of wildland firefighting represented the fundamental separation between nature and culture described by numerous environmental and anthropological scholars

(Latour 1993; Cronon 1996; Descola and Palsson 1996). I wanted to know about fire management practices, as they were presently being performed on the ground. This would help me to understand how these practices compared to federal and state fire management policies. I was interested in the ratio of prescribed fire to fire suppression and the motives behind this ratio. My background readings in political ecology as well as the history of wildland fire led me to the conclusion that the exclusion of fire from American forests was primarily the result of powerful political economic interests. It was my hypothesis that the development and current status of wildland firefighting in America was formed through a series of powerful discourses and subjugations initially based upon westward expansion and settlement and transitioning later to the need to protect timber investments, tourist revenues, real-estate, and an increasing suburban population. The ethic of fire suppression was driven by the development and commoditization of the natural world. Through this commoditization “the forest as a habitat disappeared and was replaced by the forest as an economic resource to be managed efficiently and profitably” (Scott 1998:13). Fire was seen as limiting both efficiency and profitability by those with the symbolic, economic, and political capital to influence policy decisions (Bourdieu 1998). Fire suppression therefore, became the institutionalized American response to fire in wildland areas.

Fortunately, perhaps, this research direction never fully materialized. I was not able to gain employment on a wildland fire crew. The only position offered me was that of a brush disposal crewmember working for the state of Utah, and my position in this field was still tenuous at best. “Dedicated.... Supposedly,” were the only remarks on the interview

review form that had “accidentally” been left in my employment folder for the first day of work. I came to realize that work ethic was the number one qualification for this type of job. It was apparent that something within me had led people to believe that I was under-qualified.

The brush disposal crew performed mechanical fuels reduction projects on private lands throughout northwestern Utah using chainsaws and large, yellow Vermeer wood chippers. It was basically the same type of manual labor as the fire crews but without certain associated perks like overtime, hazard pay, or actual fire experience. We were never allowed to be near a fire while a member of this crew. It was an entry-level position within the state wildland fire hierarchy. There was a possibility of being “bumped up” to a fire crew if we performed well during the course of the brush crew season. It was essentially a finishing school for prospective wildland firefighters.

Yet, it was here that I was given the unique opportunity to study the meaning and production of the wildland-urban interface; spending four to eight days at a time camping out and performing fuels mitigation projects in secluded, pastoral settings of exurban development. The federal wildland fire literature defines the wildland-urban interface (WUI) as “the line, area, or zone where structures and other human development meet or intermingle with undeveloped wildland or vegetative fuels” (Final Report of the Federal Wildland Fire Management Policy and Program Review 1995:21). This definition is fairly vacuous, allowing for loose interpretations of what actually is the wildland-urban interface. One government official I spoke with similarly defined it as *the interaction of humans with*

nature outside of highly urbanized megaplexes. An area wildland-urban interface

coordinator offered another, more useful explanation of the term:

“I think the increasing number and size of fires in the West brought this term to life because of the concentration of people seeking a home in nature but still close to civilization. In my opinion, WUI describes a fine line of political and social issues. Wildfires would be able to burn more freely if there were fewer homes in the WUI. Our forests require fire cycles that they have been deprived from for centuries. Some of these homes in the WUI are second homes with no one living in them. Our fire resources may be protecting these homes, when if they were not there, the fire could be given a chance to run its course.”

Nevertheless, both of the previous definitions hint at what a former Utah wildland firefighter so succinctly stated when he defined the wildland-urban interface as *confusion*. It may very well be that this confusion stems from the separation between nature and culture in Western society, a distinction that underlies the necessity of such a term. As Descola and Palsson (1996:15) argue: “nature is a social construct and conceptualizations of the environment are the products of ever-changing historical contexts and cultural specificities.” Our culture is perceived as existing above, and indeed, outside of nature. This has important implications for our ideas and use of nature. It is through this perspective that nature has come to be commoditized not only as a productive landscape but also as a scenic landscape where the best views are sold to the highest bidder. Even the term nature has been replaced by natural resources, “focusing on those aspects of nature that can be appropriated for human use” (Scott 1998:13). Nature has become a commodity in need of protection from itself as fires and other natural disturbances are seen not only as a danger to resource revenues and land values but also to the culture embedded within these resources in what is now called the

wildland-urban interface. However, in order “to protect the nature that is all around us, we must think long and hard about the nature we carry inside our heads” (Cronon 1996:22).

I originally believed that the wildland-urban interface would not exist if not for long held beliefs about the opposition of nature and culture. Of course, outside of a fundamental nature-culture opposition there would be no need to demarcate where nature ends and culture begins. A change in this mental separation would certainly have profound effects on current methods of fire management and community protection. Indeed, the dissolution of this opposition would render the concept of the wildland-urban interface unnecessary, but unfortunately, the deeper oppositions of class, gender, and race would still remain.

It was during my season of brush crew work that I came to understand how much more there was to the concept of the wildland-urban interface than the simple separation of nature and culture. Week after week and in community after community, I slowly began to realize that, in many respects, the wildland-urban interface was more realistically a synonym for gated/private exurban communities. As such, I argue that the wildland-urban interface is a concept riddled by issues of power, prestige, aesthetics, social construction, control, and separation.

In *Fortress America*, Blakely and Snyder (1997:2) define gated communities as “residential areas with restricted access in which normally public spaces are privatized.” This privatization is maintained through deployment of “designated perimeters, usually walls or fences, and controlled entrances that are intended to prevent penetration by nonresidents.” The communities in which I was involved ran the gamut from a private “wilderness ranch”

charging monthly use fees in Sourdough, to modest recreation/vacation homes worth \$100,000 to \$200,000 in Fruitland and Argyle Canyon, to homes worth nearly \$4,000,000 in The Colony and Moosehollow⁷. Yet, all possessed a common element of symbolism and exclusion: gates. From the humble red, metal, swinging gates with big padlocks protecting middle class vacation cabins in the woods to the aesthetically pleasing, mechanical gates and guards protecting large, upper class homes in suburban oases, they all evoked a message of power and privilege, a withdrawal from the public realm, and a “politics of exclusion” (Falzon 2004:159).

Our brush removal crew was granted entrance into these communities in order to perform a job for which we had specific instructions and timelines for completion. As Dan would say, we were “workin’ in rich peoples’ back yards.” We were not neighbors, friends, family, or even casual acquaintances. We were laborers actively engaged in the maintenance of a commodified landscape. Many times residents would pause during their daily nature walks or bicycle rides through trails surrounding the areas in which we were working to say “thank you for the job you are doing, we really need it, it looks great.” Or they would offer small niceties like “I was telling the others before, there’s a water spigot up here, feel free, that’s what it’s for.” They were seemingly good people with good intentions but their comments regularly reinforced the differences between the statuses of the residents and the crew in which one group was made up of landed property owners paying the other group to do a job that they themselves, were unwilling to perform. “Social power, in such a context,

⁷ See Appendix B

resides in the ability to govern and control both the movements of individuals in space-time and their understanding of their station in the social and natural world” (Tilley 1993:82). The crew, therefore, often interpreted these comments as condescending. As Cymbals exclaimed when recounting the water spigot conversation “you can get water out of my hose!”... “Oh fuck you, like I was going to ask permission.” “Yeah he said thank you for the work you’re doing! Oh fuck you, if you want to thank me, why don’t you have your butler bring down some lemonade at lunch, bougis⁸ asshole.”

The true nature of the relationship between workers and community residents presented itself in the form of surveillance. It frequently felt as if, we the workers were being watched and judged on the basis of the community’s norms. This surveillance was particularly prevalent along the boundaries of the community – our entrance and exit was an uncomfortable process. The puzzled looks on the faces of residents retrieving their morning papers as we made our ascent in the big, red crew buggy revealed the confusion that our presence inspired. Similarly, our afternoon, single file retreat from the woods was viewed with curious suspicion by residents slowing their luxury sedans to get a good look at our crew. It was obvious that many community residents did not know we were coming and were certainly uninformed about the reasons for our presence. Carrying large chainsaws and red dolmars, decked out in hardhats, earplugs, safety glasses, work gloves, brush pants, chainsaw chaps, and covered in sawdust, sap, dirt, and chainsaw exhaust, we were wearing the uniforms of the proletariat. As such, we represented a level of heterogeneity in a

⁸ Cymbal’s abbreviation for bourgeois

culturally homogenous scene. As Cymbals commented, “it’s a gated community on top of a private community with its own golf course, so they’re like the elite of the elite.” In the midst of such company, we felt like “matter out of place,” (Douglas 1966) not truly belonging in the environment in which we were working. The tension inspired by the differences and lack of understanding between the homeowners and crewmembers only further complicated the execution of stated management objectives.

Theoretical Insights: Political Ecology

“Modern bourgeois private property is the final and most complete expression of the system of producing and appropriating products, that is based on class antagonism, on the exploitation of some by others” (Marx and Engels 1992:18)

Political Ecology was the primary theory driving my study of the wildland-urban interface. This theoretical framework is generally concerned with the ways in which social relationships affect environmental change. Yet, my specific conceptualization of political ecology was developed during the course of fieldwork in an effort to better explain how the capitalist production and consumption of nature encourages social hierarchy. As Robbins (2004:209) has noted, political ecology articulates:

“‘The inevitability and creativity of the social relationship with nature; the very real project of domination embodied in the capitalist mode of production; the differentiated relationship with nature according to gender, class, race, sexual preference; the implausibility of autonomous nature; and a strong response to the almost instinctive romanticism which pervades most treatments of nature.’”

Methodologically, this framework requires: “(1) a focus on the land users and the social relations in which they are entwined; (2) tracing the linkages of these local relations to wider geographical and social settings; and (3) historical analysis to understand the contemporary

situation” (Neumann 1992: 87). In this study, I attempt to fulfill these requirements by examining the relations between private Utah landowners and the government-subsidized brush crew employed to protect their homes from fires. I argue that the subsidization of mechanical fuels reduction is one of the newest techniques of a system of government fire protection linked to larger political, economic, and cultural forces in the US that continue to privilege private property rights, accumulation, and individualism for a select few within the national commons (Warren 1997).

Political ecology therefore provides the best insight into the ways in which nature is actively constructed to favor interface constituents with preferential access and control on the basis of cultural capital. Specifically, it is the symbiotic relationship between capital and institutional knowledge that maintains upper class dominance in the wildland-urban interface through control of fire mitigation techniques, land rights and values, and boundary formations. As Tilley (1993:81) argues:

Humanly created space is the space of social reproduction. It follows that control over the creation of that space must confer power over the form that reproduction takes and that control over space is crucial for the maintenance of power relations within and between individuals and groups.

The ideological boundary between nature and culture provides influential groups with an unquestioned authority to appropriate a commodified landscape. Through commodification, the mental and material aspects of nature are engaged in a mutually reinforcing relationship that favors a profitable fetishism (Smith 1996). This fetishism of nature is what allows

problematic concepts such as the wildland-urban interface to be both accepted and valued; placing its inhabitants and constituents in positions of “social power” (Tilley 1993:82).

Research Methods

My examination of the wildland-urban interface is primarily based upon three-and-a-half months, a full season, of participant observation performed while working for the Utah Division of Forestry, Fire, and State Lands as a member of the Red Mountain Brush Crew. The season began on May 1, 2008, and lasted until August 20, 2008. This portion of the research was largely phenomenological as a result of my theoretical background and the context of the study. In keeping with the tenets of phenomenology, I took meaning to be “inherent in the relational contexts of peoples’ direct perceptual engagement with the world” (Willerslev 2007:20). I specifically focused on the meanings that crewmembers, crew supervisors, and community residents assigned to fuels reduction work and the wildland-urban interface in general.

I was also interested in the meanings attached to the wildland-urban interface by the Utah fire management hierarchy. I conducted semi-structured interviews through snowball sampling with Utah fire management coordinators and officials in order to compare and contrast these interviews with my findings from the field. Near the end of the season, I distributed a closed-ended survey to brush crewmembers as well as some members from other crews with which I had interaction so that I might strengthen developing research themes and conclusions.

The development of research themes and conclusions was facilitated by grounded theory. Grounded theory calls for the continual analysis of field notes through memoing and coding of relevant themes. It is an “iterative process by which you...come to understand more and more deeply how whatever you’re studying works” (Bernard 2002:463). Grounded analysis of my data led me to realize that my best insights into the condition and meaning of the wildland-urban interface came from the brush crewmembers with which I worked. I found their responses were generally more informed than community residents and less clouded by institutional obligation than higher-level employees. The brush crewmembers thus drive my interpretation of the wildland-urban interface through an emphasis on the political economic aspects of political ecological theory.

Direction of the Thesis

It was the end of a fourteen-hour day of falling and swamping beetle-killed lodgepole pine trees in a rustic, vacation community known as Argyle Canyon. Cymbals, Tim, Diego, and I had just finished removing most of the ladder fuels within 100 feet of the large A-frame house we were supposed to protect from wildfire. We had all taken a seat on a lodgepole pine log at the edge of the dirt and gravel road that ran through the property when I pulled out my small notepad to make a jotting about something Diego had said a few hours before. Tim, the brush crew supervisor, saw me working in the notebook and asked, “Hey, so what is it you actually write down in that thing?” I turned and passed him the notebook as I said, “well, take a look.” He began reading the quote from Diego that I had just finished: “I know... this is good work and all, but there’s really no purpose to this. It’s not like if a fire

comes raging through here, that this is gonna stop it.” Tim stopped and thought for a moment and then replied “yeah, well...yeah.” This quote got us into a more general discussion of the usefulness of our work. Cymbals asked, “These woods are fucked right?” Tim replied, “Yeah, if a fire were to come through here it would just speed up the process that nature has started.” I then read a quote from Chunk about an earlier project where I had asked him what he thought we were protecting and he had replied: “nothin’, free fuckin’ tree service is what we are, it’s not like because we’re taking out dead trees that if a fire came roaring through here it’s gonna stop it.” Cymbals replied, “It is true, all we’re doing is just making rich peoples’ yards prettier. That’s what we do.”

This discussion of the functionality of our work is potentially problematic considering the relative inexperience of our crew. Far from being experts in our field, eight members of our nine-man crew were considered rookies before the season began. As a result, it is arguable that no one, outside of Tim, really had the knowledge required to objectively assess the utility of our mechanical fuels reduction work at the start of the season. Tim was our crew supervisor and he was obviously the most experienced member of the crew because he had previously worked for the forest service in a similar fuels reduction field. I was possibly the second most experienced crewmember, having completed a forestry degree and the two introductory courses, S-130⁹ & S-190¹⁰, required by the National Wildfire Coordinating Group to become a state or federal wildland firefighter. The rest of us had simply relied on

⁹ “Firefighter Training”

¹⁰ “Introduction to Wildland Fire Behavior”

our common sense and a basic, two-week orientation to wildland fire and institutional procedure to guide us as we made our way through the course of the season.

Yet, experience and understanding came fairly quickly because the basic tenets of fuels mitigation were not all that complicated. Essentially, small and dry is more likely to ignite than big and wet. So by the time we all arrived in Argyle Canyon, we had been given two-and-a-half months to come to terms with this guiding principle as well as the general nature of our work. Aside from one brief effort at ladder fuels reduction around one home, all we were doing in Argyle Canyon was simply felling large, dead lodgepole pine trees. Afterwards we would cut off their limbs and make brush piles to be burned supposedly some time during the winter. The boles of the trees were left in a tangled mass to dry out and rot on the ground. It did not require an expert in fire science to realize that we were not really improving the situation. We were reducing crown density but failing to address the more significant portions of the general, three-part objective of fuels management – surface fuels and ladder fuels (Agee and Skinner 2005). As the Wasatch district forester had told us the day before, “you guys are doing a great job up here, but it’s not going to make a difference if a fire comes through.” That was the second time and the second project on which he had made that type of statement. The next day, Cymbals had gone even farther; asserting that not only were we not reducing the threat of fire, we were actually making it worse: “This is a real clusterfuck. I think we just made this forest like ten times more combustible, especially in a couple of months when all of this stuff really dries out and these fuckin’ piles are still here.”

The hierarchy of the crews operating out of the Red Mountain Conservation Center only reinforced what our limited experience allowed us to ascertain about our dearth of functionality and importance. It was abundantly clear by the middle of the season that fuels mitigation did not occupy much of a standing within the overall framework of Utah fire management. One of the fire program coordinators at the conservation center told me earlier in the season “we do maybe ninety-nine percent fire suppression and one percent prescribed fire.” Positions of organizational significance were obviously reserved for fire suppression and the individuals who composed those crews. There were four crews at Red Mountain that were dedicated almost exclusively to fire suppression, one that performed a combination of suppression and fuels reduction, and our brush crew that toiled exclusively at fuels reduction by working on “projects.” The fire suppression crews would join us on these projects during the rare times that they were not suppressing fires. While the crews were normally separated during the workday, we would often interact with each other back at the campsite or during gas station stops to refuel vehicles and equipment. It was during one of these stops that a fire suppression squad boss expressed his opinion of the brush crew’s work. He pointed out a “Trees Inc.” tree removal service truck parked at the same gas station and explained, “there’s your competition, you should mess with their chipper, throw some rocks in it,” implying that we were nothing more than a subsidized tree service.

The interface setting also contributed to our skepticism in the true functions of brush removal, as the vast majority of our work was performed at the behest of affluent residential or vacation communities. While Argyle Canyon may not be the best representation of this

affluence, it still represents a second home, vacation community protected by gates. It should be noted that even in the more modest vacation communities, our work was generally concentrated around the newest, largest, and presumably most valuable homes. Finding ourselves consistently working within settings of disproportionate affluence caused us to question the actual justification for our work. Did fire only threaten affluent communities or were there other reasons for our presence in these particular cultural landscapes? The combination of our own contextual knowledge, the nature of our work, as well as our placement within both the organizational and interface hierarchy meant that there was always a constant sense of tension between oppositions like aesthetics and functionality, undeveloped and developed, woman and man, as well as rich and poor.

The analysis of these emerging oppositions allowed me to better understand how the production of the wildland-urban interface in northwestern Utah was illustrative of the growing distance between rich and poor nationwide (Low 1997). Through interface and similar landscape constructions, nature continues to be commoditized by certain capitalistic values related to aesthetics, recreation, exclusivity, and privacy (Blakely and Snyder 1997). The wealthy exercise power over valued landscapes by investing in exclusive residential properties with gates and security devices that control access and demarcate the prestige of their locations. Significantly, the participation of these communities in federal and state fuels reduction cost-share programs like FIREWISE helps to reproduce these social relationships in idyllic landscapes maintained by taxpayer dollars.

FIREWISE is a popular, federally subsidized fire management program with similar local and state spin offs. The program is planned and funded with the complexity characteristic of any bureaucratic process. Communities must write up a Community Wildfire Protection Plan that summarizes certain tasks they would like to perform to reduce their susceptibility to wildfire. This document must be submitted to the state of Utah along with evidence of cost share or labor share activities. The state of Utah, in turn, applies for federal grant money that is eventually distributed back to the state. The state then distributes this money back to the various proposed projects based upon the amount of funding available and a standardized ranking of all potential projects (Utah Wildland-urban Interface Coordinator, pers. comm., 8/08.). Local Division of Natural Resources or fire representatives are certainly consulted to some degree to help in the development of the Community Wildfire Protection Plan; however, it seems that the left hand does not always know what the right hand is doing once field operations begin. The power to reduce or curtail certain management activities, therefore, always resides in the hands of the organizing community association. This right is often invoked once the true extent of the aesthetic damage is determined because a full-scale mechanical fuels reduction operation would significantly reduce the landscape capital in which many residents are so heavily invested. It is for this reason that brush crew operations often amount to no more than dead tree removal or what the Wasatch district forester would call “a good start.” They provide legislators and community members with psychological peace of mind but questionable results. Fire management in the wildland-urban interface is thus plagued by the fundamental separation

between nature and culture that continues to be reinforced by a capitalist consumption of the landscape. Fuels reduction programs facilitate this interaction between the mental and the material by contracting crews such as Red Mountain to perform a generally skewed combination of fuels mitigation and aesthetic enhancement in an effort to maintain privileged lifestyles at the fictional boundary between nature and culture.

In the chapters to follow, I will better explain the symbiotic relationship between the mental and material processes that maintain the wildland-urban interface by documenting the systems of knowledge and landscape contestations that set the stage for the development of the wildland-urban interface and the necessity of fuels reduction therein. This discussion will illustrate the main themes to arise from my research: the differential access and control of valued landscapes based upon political, economic, and cultural capital and the facilitation of this control through the gendering of landscapes and labor.

Chapter 2

“Contested Landscapes: The History of Fire Policy and The Expansion of the Wildland-urban Interface”

Introduction

“Man, Salt Lake City is growin’ so fast. There’s shit everywhere. I’ve never seen it like this.” – Medina

“We’ve had a lot of forest fires in the past few years, even in the Mt Olympus area, enough that sometimes they [the forest service] have to come out and protect the homes. But I guess that’s what all those rich folks get for building their homes where nature should be.” – Salt Lake City Homeowner

The history of the transformation and commoditization of “nature” in the American West has been characterized by relentless expansion and the palimpsest of rural landscapes and livelihoods by urban ones:

The modern North American West is one of the most contested landscapes in the world...Since World War II, the West has been transformed from an overwhelmingly rural society dominated by extractive industries such as mining, grazing, logging, and agriculture to an overwhelmingly urban one characterized by explosive growth. As cities such as Phoenix, Denver, and Salt Lake City relentlessly expand, spawning bedroom communities in relentlessly radiating circles all around them, they destroy wildlife habitat, fragment the West’s famed open spaces, and convert farm and ranch lands into subdivisions. They also create powerful urban political constituencies. (Sheridan 2007:122)

Landscape contestation began with the arrival of European colonists whose values and norms quickly became the basis of a powerful discourse used to redefine nature and thereby gain control over the land and its uses (Cronon 2003). These commercial initiatives and agrarian idealisms effectively colonized a previously organic nature under the reign of capitalism (Escobar 1999) and continue to reproduce this situation today. Of particular

interest to this study are the ways in which this changing conception of nature affected attitudes toward, and uses of fire in the west, effectively producing the transformation from fire use to fire suppression that aided and legitimized government forestry while providing the ideological grounds for a concept such as the wildland-urban interface. At the heart of fire suppression has been the idea that it is an effective tool for protecting economic interests in the American West. In the remainder of this chapter, I discuss the changing fire regimes and political economic landscapes in the West in order to contextualize the concept of the wildland-urban interface and the work I performed as a member of the Red Mountain Brush Crew.

Historical Ecology, Occurrence, and Changing Fire Regimes in the American West

The vegetation of western ecosystems is characterized by an altitudinal gradient. Basin, range, and other areas of lower elevation typically exhibit sparse vegetation that increases with increasing elevation due to higher rainfall. The tops of many mountains receive enough annual rainfall to produce pine forests as well as some spruce and fir forests. These ecosystems occurring at elevations of 2500 feet and above are the most susceptible, and therefore most adapted to fire. “These grasslands and the higher chaparral and pine forests are fire areas that at present are undergoing changes because of fire control” (Phillips 1962:85).

Widespread settlement and the introduction of intensive cattle and sheep grazing in the area facilitated the invasion of the grasslands by mesquite shrubs and trees. This grazing

had the effect of reducing the amount of fuel available to carry the historically high frequency fires that maintained the area.

“As the inflammable material lessened, fires were no longer able to burn out the young seedlings and even during the rare favorable years for grass production local fires only top-killed the mesquite and left the roots to sprout from extensive, well-developed root systems” (Phillips 1962:86).

The grasslands were gradually taken over by mesquite, largely contributing to the current low frequency, high intensity wildfire situation in the west.

Yet this has not always been the case. Before widespread European settlement, prescribed burning was an environmental tool employed by Native peoples throughout this region. As Stewart (2002:224) argues:

“The Indians of the Southwest, both sedentary farmers and nomadic hunters, set fire to fields and forests in order to facilitate hunting and to improve wild seed growth and pasturage; the vegetation burning done by Indians and early settlers had the effect of producing and maintaining grass against the encroachment of woody vegetation; when fires were no longer common, brush and trees took possession of the grasslands; the invasion of grasslands occurred whenever the fires were stopped either because of the lack of fuel caused by overgrazing or because of complete protection.”

Western fire regimes during this period (prior to 1900) were characterized by “high frequency, low intensity surface fires” (Touchan et al. 1994:41). The mean fire return intervals for both ponderosa and ponderosa-mixed-conifer forest classes in this area ranged from “two to ten years” (Swetnam 1988:9). Variations in these intervals have been variously attributed to “differences in the topographic situation, site specific histories of intensive livestock grazing, and climatic variability” (Touchan et al. 1994: 41). As previously mentioned, the end of this period of frequent, widespread surface fires has been linked to the

onset of intensive livestock grazing in 1893 as well as concentrated fire suppression efforts beginning in the early 1900s (Touchan et al. 1994).

These two developments ushered in a new fire regime in which indigenous firing practices were gradually replaced with fire suppression “to accommodate European notions of fixed property boundaries” (Cronon 2003:118) and the belief that fire was inherently destructive. This fire regime has continued into the present day. It is characterized by lower frequency, higher intensity fires with a concurrent increase in the number of large-scale fires. The increase in the number of larger, higher intensity fires has been connected to a “change in climate and/or a change in fuel loadings” (Swetnam 1988:8). The change in fuel loadings is most directly attributable to fire suppression resulting from the effects of changing land uses and conceptions of fire. The new regime of fire suppression was driven by the agrarian idealism and the discourses of capitalism. Fire came to be seen as serving no ecological function other than the destruction of agricultural crops, range, timber, and human settlements. Therefore it was necessary to prevent and suppress fire whenever possible. Years of fire suppression have resulted in the change in species composition and structure of western lands that now favors large, intense fires. Forests in this area currently exhibit an increased “formation of dog-hair thickets, decreased understory coverage, and increased fuel-loading” (Touchan et al. 1994:43). The change in forest structure resulting from the change in fire regimes has created a managerial paradox:

“If in the short term we are effective at reducing wildfire occurrence below a certain level, then sooner or later catastrophically destructive wildfires will occur. Even the

most efficient and advanced firefighting efforts can only forestall this inevitable result” (Swetnam & Baisan 1994:12).

This managerial paradox means that the ethic of fire suppression is difficult to change. On one hand, a prescribed or let burn policy might allow for significant reductions in fuel accumulations and eventually a more effective and efficient means of fire management. On the other hand, the probability of one of these fires advancing to a “catastrophic level” is exceedingly high under current fuel conditions. The expansion of residential development and stigma of uncontrolled fire only further complicates the issues surrounding fuels reduction and fire use in the West. Therefore, fire suppression continues to be the primary method of dealing with fire in the Western environment.

In this act, indigenous knowledge about fire has been discounted and replaced by a popular, generalized knowledge influenced primarily by the ideals of capitalism. Yet in order to properly address the current wildfire situation it is necessary to recognize the ways in which previous, indigenous firing practices adapted this ecosystem to high frequency ground fires (Stewart 2002). The replacement of these practices with fire suppression continues to significantly impact the western landscape. The ideals that motivated this transition demonstrate the ways in which the cultural construction of nature represents a continual discourse in power fueled by cultural capital. It is a discourse that is currently being played out in previously open spaces that have been privatized for aesthetic consumption by those with the necessary means. It is the exurban community collectively known as the wildland-urban interface and it is one of the biggest constraints to appropriate

fuels management and the reintroduction of natural fire cycles facing the present American landscape.

The Wildland-urban Interface

“During my tenure, the biggest shift in organizational approach to wildfire has been fuels modification around structures” – Utah wildland-urban interface fuels coordinator

Although the concept of the wildland-urban interface did not appear in federal wildfire management circles until the 1980s and 1990s, its antecedents can be traced throughout the history of America’s antagonistic relationship with fire. With each passing year, the debate over appropriate fire policy intensifies as fuel loads continue to increase and more and more people move into the wildland-urban interface, which is to say, directly into harm’s way. Over a century of fire suppression inspired by powerful economic interests and legitimized by professional forestry has come under scrutiny from all sides. Critiqued for its shortsightedness, the campaign of fire suppression is blamed for unnatural levels of fuel accumulation and the resulting expensive, large-scale fires that continue to threaten lives and property year after year (Aucoin 2006; Kauffman 2004; Nash 2003; Donovan and Brown 2007; Ingalsbee 2000).

However, while the concept of fuels reduction represents a point of convergence in official fire policy, the methods of accomplishment are quite open to interpretation. Opinions from laypersons and homeowners in the wildland-urban interface favor fuels reduction methods such as forest thinning, brush removal and livestock grazing that do not involve the use of fire, while the majority of land managers have begun to advocate the necessity of

regular fire within fire adapted ecosystems (Brunson & Schindler 2004). The preference of wildland-urban interface homeowners toward mechanical fuels reduction forms the basis for the work performed by brush crews such as Red Mountain. The majority of cost share funds are accordingly expended on these mechanical fuels reduction efforts. Thinning, however, is no substitution for regular fire (Aucoin 2006; Kauffman 2004; Nash 2003; Donovan and Brown 2007), so it is difficult to determine exactly how much of this work is functional and how much is merely aesthetic. From my experiences on the ground, I would have to largely echo my crew supervisor's sentiments when he said, "c'mon it's ten percent labor and ninety percent aesthetics." Unfortunately, prescribed fire is becoming an increasingly difficult option as the wildland-urban interface continues to expand. Burning the number of acres necessary to protect against future large-scale fires is nearly impossible in the contemporary, fragmented landscape (Franke 2000; Utah Wildland-urban interface fuels coordinator, pers. comm., 7/21/08). The real estate, natural commodities, and aesthetics of the interface are simply too valuable to risk destroying in a prescribed fire. They must be protected from all fire. The ethic of fire suppression that remains so pervasive today can be traced all the way back to the beginnings of forestry as a scientific discipline.

The History of Forestry

"The history of the forestry movement in the United States from its beginnings in the early twentieth century to the present is in large part the story of a relentless struggle against fire in the woods," (Morgan 1978:167) advancing undoubtedly as a result of the aims of the industrial counter-reclamation. The industrial counter-reclamation was characterized by "the

abandonment of marginal farm land from the mid-nineteenth century on” as a result of “national concern with conservation, prospects of timber famine, water shortages, alarm over the closing frontier, new industrial uses for wood products, and new fuels to replace firewood” (Pyne 1982:59). Not only is this trend apparent in the United States, similar movements can be linked to many developed nation-states. These movements effectively demonstrate the bureaucratization of nature; the need to control, manage, and often conquer the natural world through adherence to state-sanctioned, scientific methods developed by socially acceptable and “popular knowledges” (Foucault 2006). The industrial counter-reclamation provided the impetus for the widespread deployment of forestry as a professional discipline in the United States. Indeed, it effectively demonstrates Sivaramakrishnan’s (1998:32) argument about forestry as a tool for development:

“In forestry, development operates chiefly to enhance common or national goods and values focusing on public lands. This structural distinction mobilizes different cultural hierarchies in the establishment and maintenance of work relations, within the limited field of possibilities generated within a historically formed regional culture.”

The development of an approved, scientific knowledge of forestry allows certain groups, through adherence to this knowledge, preferential access and control over nature. Perhaps most importantly, it provides these groups with the power to influence and, in fact, create nature to reflect the dominance of cultural values like capital accumulation. These differential power structures continue to be reinforced by the wildland-urban interface where public funds are used to protect and/or enhance private lands.

In many nation-states such as the US, the importation and adherence to European, academic forestry and its subsequent attempt to suppress fire in most forested lands “distinguished modern forest management from the primitive techniques it claimed to supersede” (Sivaramakrishnan 1996:145). A generalized forestry in the European tradition came to be favored over traditional, locally specific knowledge about the environment. Practitioners of this type of forestry were placed in powerful positions of influence over the future of forest management and the wildfire decisions that these positions encompassed. This differential control and access to nature would prove to have a significant effect upon the future of America’s forests. It is in this way that indigenous knowledge came to be replaced with generalized knowledge, eventually leading to the “subordination of the fundamental to the contingent and instrumental” (Brosius 2008:364). The fundamental task of good forest husbandry came to be replaced by the instrumental goals of capitalism and its need to protect timber investments. The interests of a burgeoning timber industry would drive the ethic of fire suppression (Morgan 1978) and legitimize the discipline of forestry.

The motivation behind professional forestry and its concomitant wildland fire management has remained much the same to this very day. Forestry is the institutional knowledge that facilitates capitalist nature production. As such, “unauthorized disturbances” (Scott 1998:18) like fire are seen as threats to resource revenues. From the mid nineteenth through the mid twentieth century, we were interested in protecting timberland investments; in 2008 our interests have shifted more toward the protection of real estate constructed in the areas of former timberlands – the wildland-urban interface. The protection of natural

commodities continues to reproduce the invisible boundaries of American nature and culture, thus maintaining the belief that fire is the unacceptable hazard of a disorderly environment.

The development of federal wildland fire policies and the associated landscape interests these policies were designed to assist can further measure the historical trend of political economic interests in the West. The history of contemporary America's relationship with fire can thus be broken down into four time periods: the frontier fire (1910-1930), the backcountry fire (1931-1949), the mass fire (1950-1970), and the wilderness fire (1971-present), as discussed by Pyne (1981).

History of Wildland Fire Policy

Federal wildland fire management began in the United States in 1886, when members of the US Army were used to patrol the first National Parks (Caban 2007). Following the transfer of federal forests from the Department of the Interior to the Department of Agriculture in 1905, the United States Forest Service was put in charge of the management of National Forests which resulted in the creation of the first forest-fire management plan by then Forest Service Chief Gifford Pinchot. As explained by Caban (2007:3):

“The establishment of the National Forests was a direct result of the active conservation movement of the times. The newly established agency and its Chief wanted to promote an efficient use of the natural resources under the agency's supervision through coordinated, centrally directed decisions made by forestry professionals.”

Significant to early Forest Service management policies was the influence of Pinchot's training in German forestry, emphasizing the economic gains to be made through scientific forest management. Pinchot was an advocate of conservation, not preservation

(White 1985). National Forests were to be working forests, providing a number of benefits to the public, not the least of which was timber revenue. The purpose of most early Forest Service mandates was to “ensure future productivity of forest lands and to prevent forest devastation” (Cubbage et al. 1993:421). The need for forest regeneration after harvest and protection from fire during the intervening years of growth was of foremost importance. “In the early years of the century, foresters declared that industrial forestry and the protection of reserved watersheds would be impossible unless surface fires were eliminated” (Pyne 1981:77). As a result of these original goals, a forest-fire management plan was developed and implemented to protect forests by excluding fires from the landscape.

“Frontier Fire” (1910-1930)

It was not until 1910, however, that truly concentrated fire suppression efforts began in earnest. The period of frontier fire was impelled by controversy over the light burning practices of the western frontier timber and agricultural economy and the large-scale fires of 1910¹¹. Advocates of light burning argued that it was an effective method to reduce fuels and fire potential. The Forest Service saw this argument as a threat to their professional legitimacy arguing, “light burning sacrificed reproduction for the preservation of the status quo, that the technique was more expensive and less effective than systematic fire protection” (Pyne 1981:68). The policy of fire exclusion was therefore strengthened by acts of Congress such as the Clark-McNary Act of 1924. The Clark-McNary Act reflected the Forest Service’s continuing interest in timber production as it authorized the purchase of land for the

¹¹ 1.215 million hectares of timber producing forests in the states of Idaho and Montana burned in these fires, claiming the lives of eighty-six people.

production of timber. This act “marked the origin of federal-state cooperation in forestry”(Cubbage et al. 1993:529) expanding “the capabilities of the Forest Service to provide cooperative fire protection on any timber producing lands” (Caban 2007:4). Unfortunately, history would prove the case of these light burning advocates as the build up of fuels resulting from the effectiveness of the policy of fire exclusion would only add to future fire problems (Caban 2007).

“Backcountry Fire” (1931-1949) & “Mass Fire” (1950-1970)

The period of backcountry fire was characterized by a general concern for the possibility of destructive fires on undeveloped or cut over land “for which fire protection was an investment in the future” (Pyne 1981:71). Lands needed to be protected to ensure resource investments and future profitability. The creation of the Civilian Conservation Corps in 1935 significantly advanced the nation’s ability to suppress fires by providing more available manpower and resources for suppression activities. The technological advances stimulated by World War II led to increased firefighting abilities following the end of the war. Superior tools including new aerial, ground, and other forms of mechanized “attack” were obtained from military surplus to help in the battle against wildfire. Not only did the Federal Surplus Program increase the technological capabilities of the Forest Service, it also provided equipment to cooperating state programs, thus “creating a formidable nationwide fire suppression organization” (Caban 2007:4). The Smokey Bear campaign unveiled during the war was also tremendously effective in garnering increased public support for wildfire

control (Brooks 2004). The fire suppression ethic had transitioned to a full-scale hegemonic discourse.

Pyne (1981) has labeled this time of increasing military interest in fire control as the mass fire period. The mass fire period was prompted by the events of World War II and the creation of the atomic bomb. It was characterized by the defense department's initiative to develop more effective means to control large-scale conflagrations in or near heavily populated areas. The Forest Service became a key partner in furtherance of this goal. "Fire control became a part of national defense," in which the "controlling doctrine was the concept of conflagration control, to prevent small fires from making the transition to mass fire" (Pyne 1981:73). Subsequent controversies such as the Cuban missile crisis and the Vietnam conflict only increased the need for understanding and control. The government wanted to prevent the pandemonium that might be caused by well-placed enemy firebombs burning within and around large cities. Thus, the Forest Service's wildfire responsibilities expanded to include not only the wilderness, but also a yet-to-be-named wildland-urban interface.

Meanwhile, institutional understanding of the ecological role of fire was shifting. Studies recognizing the importance of fire to the maintenance of fire-adapted ecosystems were gaining credibility within the circles of institutional knowledge (Day 1953; Phillips 1962; Stewart 1955 & 1963 & 2002). "Because nothing was allowed to burn, fuels continued to build up. The Forest Service's policy of fire exclusion was creating a highly fueled environment, which resulted in conditions of high fire risk and increasing fire

severity” (Caban 2007:5). These scientific findings would be used to justify a change in Forest Service fire policy.

Beginning in the 1960s, the Forest Service’s involvement in timber production began to wane. A number of legislative acts¹² made timber production much more difficult as a primary pursuit. These acts compelled the Forest Service to improve long-term planning, carefully analyze the possible affects of all proposed environmental actions, and concentrate efforts at multiple use management (Cubbage et al. 1993). As a result, new understandings of the role of fire in natural ecosystems, or better yet, changing attitudes toward old understandings of fire provided the Forest Service with an appropriate justification to try to reduce fire suppression expenditures. With a decline in timber production, the ethic of conservation began to transition to an ethic of preservation.

“Wilderness Fire” (1971-Present)

The wilderness fire period was a reaction to the ineffectiveness of previous fire campaigns. “In 1970 – despite several decades of intensive fire research, equipment development, and healthy financing – fire complexes in Washington and California burned more acreage on the national forest system than in any year since 1910” (Pyne 1981:74-75). The scientific validation of fire as an ecological necessity coupled with the changing economic interests of federal natural resource management programs inspired a new method

¹² Multiple Use-Sustained Yield Act (1960), National Environmental Policy Act (1969), Endangered Species Act (1973), Forest and Rangeland Renewable Resources Planning Act (1974), and the National Forest Management Act (1976)

of dealing with fire in “wilderness” areas; one that reemphasized the separation between nature and culture.

From 1968 to 1978, starting with the National Park Service and later expanding to the Forest Service and all other federal land management services, a policy was adopted “that allowed certain fires to burn, especially in designated wilderness areas” (Franke 2000:11). While fires of human origin were still suppressed, fires caused by lightning were allowed to burn under the “natural-prescribed fire policy” and considered “under prescription” as long as they did not “jeopardize human life, park facilities, personal property, or endangered or threatened species” (Franke 2000:11). Unfortunately after more than fifty years of institutionalized fire suppression, it was difficult to convince the majority of federal and state land managers to change their approach to fire management. The policy of natural-prescribed fire proved inadequate for creating the type of significant fuels reductions necessary to improve the fire situation, and the overall reduction in timber harvesting further complicated the fire environment by curtailing what maintenance of fuels and regeneration of vegetation industrial forestry had actually provided. Therefore “full fire suppression continued to be the dominant strategy” (Caban 2007:5).

The dilemma over how to deal with wildfires steadily gained momentum through the 1990s as fuel loads increased in quantity and age due to continued fire suppression and declines in timber production. The wildland fire issue was exacerbated during this time period by the increased movement of people into the so-called wildland-urban interface. The growing shift from utilitarian extraction to scenic amenity production further complicated

efforts at appropriate prescribed fire implementation and mechanical fuels management. In 1994, these developments combined to produce a fire season in which fire suppression expenses reached almost \$1 billion, thirty-four firefighters lost their lives, and significant damages to natural resources and private property occurred (Caban 2007). More than ever, fire was an unwelcome guest in the midst of an expanding, productive culture.

The experiences of 1994 prompted a review of fire policy in which a new policy was developed “directing federal agencies to achieve a balance between suppression to protect life, property, and resources, and fire use to regulate fuels and maintain healthy ecosystems” (Caban 2007:5). Although The Federal Wildland Fire Management Policy and Program Review attempted to reconcile suppression and burning, the critical reason for the change in policy should still be seen as directly related to economics. Under the new policy, managers were supposed to consider the economic efficiency of their actions in response to a wildfire situation (Caban 2007). There was less of an incentive for full-scale suppression because timber production on federal lands had significantly decreased. Furthermore, it was becoming abundantly clear that the policy of exclusive fire suppression, at current fuel load levels was not effective. Popular scientific knowledge was being used in an effort to reduce wildfire suppression expenditures and to justify the realization that, in a number of circumstances, wildfires could no longer be effectively suppressed, no matter how much money was spent in the effort.

Subsequent costly fire seasons in 1996, 1997, and 1999 prompted another revision of fire policy in 2001 and the development of the comprehensive National Fire Plan. This

revision gave further credence to the role of regular fire in maintaining healthy ecosystems and appropriate fuel levels. The policy stated, “Fire, as a critical natural process, *will* be integrated into land and to resource management plans and activities on a landscape scale, and across agency boundaries” (Caban 2007:5, my emphasis). Yet, this integration of fire could only reasonably be expected to occur on large tracts of public lands. Implementation of fire on private lands in the growing interface zone, where it was arguably most needed, presented many more logistical and jurisdictional difficulties. As a result, private “at risk” areas received subsidies primarily for mechanical fuels reduction work. From 2000 to 2003, 300 million dollars in federal funding was provided to reduce fuel levels in accordance with the revised fire policies of 1994 and 2001. Policy makers believed, “a reduction in hazardous fuels would bring about a reduction in the number of wildfires and the associated suppression costs¹³” (Caban 2007:6).

The increasingly desperate need to determine appropriate methods of fuels reduction and fire management was displayed in the passage of the Healthy Forest Restoration Act, legislation aimed at reducing fuels levels through an adherence to questionable ecological principles. The passage of the Bush-sponsored Healthy Forest Restoration Act (HFRA) in 2003 was motivated primarily by the steady growth of the wildland-urban interface and the need to protect valuable, “at risk communities.” The HFRA aimed to reduce fuel loads and restore forests through commercial thinning and logging. In addition to the ethic of fire

¹³ “Wildland fires had affected more than 24 million hectares at a direct suppression cost of 9.642 billion dollars” (Caban 2007: 1).

control, this act marked an attempt to facilitate a limited return of commercial timber interests to federal lands. While proper forest management and timber production would almost certainly be beneficial to fire management efforts, the HFRA seems to have promoted poor ecology in the name of short-term profits.

The HFRA allows timber companies to “thin” forest stands in wilderness areas under the guise of fuels reduction, freeing them from the constraints of the National Forest Management Act, the Appeals Reform Act, and the National Environmental Policy Act (Aucoin 2006). When it comes to fuels and fire reduction, however, the logic of the HFRA does not hold. The problem with the HFRA is that when the timber industry “*thins* trees, it expects to make a profit. Thus it must cut big (commercially valuable) trees to offset the cost of thinning smaller ones” (Aucoin, 2006:71). This type of “thinning” removes larger, more fire-resistant trees and leaves smaller ones in their place, thus increasing, rather than decreasing fire severity. The act encourages high grading when a clearcut¹⁴ or some form of low thinning¹⁵ would be more effective at achieving fuels reduction and sound forest regeneration. American environmental policy once again finds itself compromised by simplification, political rhetoric, and short-term economic interests. After nearly a century of failed fire policies we still believe ourselves to be effective environmental managers with the ability to objectively address an increasingly complex situation.

¹⁴ A forest management regeneration method in which “all trees are removed before regeneration occurs” (Daniel et al. 1979:441).

¹⁵ An intermediate forest management treatment in which the “objective is to release the dominant and codominant trees by removing the lower crown classes” (Daniel et al. 1979:420).

The difficulties associated with determining the proper course of action in regard to wildland fire point directly to the ever-growing commoditization of nature and the division between nature and culture required by this act. This division has been made possible by the replacement of localized, region specific knowledge for a generalized, scientific knowledge and the capitalist drive for efficiency and revenue. By favoring the insights of certain interest groups associated with the federal government and its economic constituents, we have created a situation in which these groups have come to have preferential access to and control of nature. Our concepts of nature have essentially come to be defined by these capitalistic interests. On an ideological level, fire represents “matter out of place” (Douglas 1966) in an increasingly developed, luxurious landscape. The monetization of “wilderness” only reemphasizes this ideological distinction. As culture expands, nature continues to shrink, leaving little time for long term planning and little room for fire use. As Cronon (2006:25) argues, “‘nature’ is not nearly so natural as it seems. Instead, it is a profoundly human construction.”

So whose nature are we protecting now? While timber production may not be the economic force that it once was, scenic real estate development, especially in the form of gated communities, continues to grow (Blakely and Snyder 1997, Low 1997). Fire management plans and dollars are now being allocated to these landscapes of privilege because they are the “at risk communities” with the necessary capital to match government cost-share funds. Essentially, we are protecting the upper classes, their property, and their nature at the expense of all taxpayers. These interests have given rise to federal and state

funded crews, like the Red Mountain Brush Crew, who perform an often-skewed combination of fuels mitigation and aesthetic enhancement in order to “protect” a private, commodified interface.

The History of the Red Mountain Conservation Center and the Development of the Red Mountain Brush Crew

“Our work is mostly federally subsidized through the Federal Wildfire Program. They pay from 70-95% of the costs for fuels reductions and fire prevention in ‘at risk communities.’ The communities have to come up with the rest.” – RMCC Fuels Program Manager

The Red Mountain Conservation Center is located on the Utah State Prison grounds, just inside the outer prison gate. The location of the center makes it difficult to find, as one does not normally associate natural resource management with correctional facilities. This setup, however, goes back to the origins of the center and its firefighting programs.

The Conservation Center originally started as a plant nursery on the campus of Utah State University. The fire-fighting program did not begin until the nursery was moved onto the grounds of the Utah State Prison where it officially became recognized as the Red Mountain Conservation Center. In 1978, the state granted the center funding for a six-member wildland fire crew. This crew was subsequently split among the various state regional offices so that each office had its own two to three person fire crew. It would soon become apparent that any type of effective management scheme would require a much larger workforce.

There had been a discussion of using inmate crews in 1978, and indeed a few inmates had been used on fires during that year. It was not until 1979, however, that the fire program

manager, now the conservation center director, and his two regional crewmembers began a full-scale effort to develop a full inmate crew. As the conservation center director explained, “I had to go down into the main prison population carrying chainsaws and axes through the main courtyard to put on classes to instruct them in wildland firefighting techniques. It really evolved from that point.” The inmate crew was a “call when needed” resource. The inmates were issued a “hardhat, a fire shirt, and a canteen” and then driven to the site of the fire in a crew buggy. They would fight the fire, and then when it was over, they would be returned back to the general prison population. This particular setup continued until about 1982 when the inmate crews were moved to their own housing facility to avoid the possibility of intimidation and manipulation by other members of the general population.

It was during this time that the inmate crews transitioned from a “call when needed” resource to a full time workforce. In 1983, more manpower was needed as years of suppression had made the fire environment increasingly problematic. The inmate crews were given year-round employment through the combination of fire suppression and project duties. They performed tasks like trail work, fence work, campground maintenance, mistletoe clearings, and stream restoration when not on fires. Full time inmate crews were used until 2000 when the new National Fire Plan changed institutional priorities and tightened fire crew classifications:

“In 2000, things changed, there was the National Fire Plan, and there was a big emphasis on removing fuels from the urban interface. There was a lot of concern about property damage, and threats to life and property, as more and more people were living in that interface zone, and more importantly, money was made available. So our emphasis had

turned from those fencing and range projects to strictly fuels management” (Center Director, pers. comm., 7/14/08).

It was also at this time that fire crew classification changed to reflect the increasingly dangerous western fire landscape and the recent rise in fire crew fatalities. Wildland fire crews’ responsibilities had grown with the continued development of the wildland-urban interface. Fires on previously less developed lands now had to be suppressed as a result of their proximity to interface life and property. The environment was more highly fueled and filled with new logistical and operational difficulties. Firefighters were more apt to find themselves in precarious situations, trapped between fires and the interface communities they were trying to protect.

Consequently, much more emphasis was placed on experience and training. On a type two crew,¹⁶ forty percent of the crew was required to have prior firefighting experience, while a hotshot crew¹⁷ still required eighty percent prior fire experience. The eighty percent annual turnover rate on inmate crews made it impossible to fulfill these standards. Because most of the program’s money was made through fire suppression activities, this loss of federal classification resulted in the inmate crews gradually being disbanded. 2001 was the last year that inmate crews were used to fight fires in Utah. The transition from full time, inmate crews to seasonal, civilian crews was made within a year.

The former “Flame-In-Go” inmate, hotshot crew was converted to a civilian, first response suppression crew known as the Red Mountain Hotshots. The Kings Mountain

¹⁶ A secondary response fire crew

¹⁷ A highly trained, type one, initial response fire crew

Initial Attack Crew and the Red Mountain Engines crew were also created to work almost exclusively as fire suppressors. The development of three additional crews throughout the 2000s reflects the continued development of the wildland-urban interface, increasing interest in wildland firefighting as an employment option, the difficulty of managing wildfires at current fuel levels, and the overall growth of wildland firefighting as an industry.

In 2003, an internship between Utah Valley Community College and the conservation center provided the workforce for the UVCC fire suppression crew. The Red Mountain Brush Disposal Crew was also formed in 2003 to specifically work on presuppression, mechanical fuels reduction projects in “at risk” communities throughout Utah. This crew subsequently became an entry to wildland firefighting for individuals with no previous fire experience. The Burro Mountain Fuels crew developed in 2007 out of an internship with Utah Valley State’s Fire Science program. This crew was created to work on both fuels mitigation projects and fire line details.

The fire program at Red Mountain Conservation Center has grown significantly over the past thirty years. It has transitioned with the times in an attempt to keep up with an increasingly fueled and developed landscape. From its six-member crew in the late 1970s, it has grown to a six-crew firefighting force employing ninety, predominantly male, seasonal firefighters at a current base hourly wage of \$11.92. Gone are the days when the people of Utah could depend on a small, interchangeable crew of inmates to protect them from fire for miniscule wages and prison furlough. Today’s fire environment requires a more professional

effort. It requires the dedication and monetary stimulation of a much larger, more experienced civilian workforce employed for strictly fire related activities.

The center's administration has also grown from its inauspicious beginnings. The fire program now employs four executives who exist above the spectrum of the crews and their supervisors. The center director oversees all operations, the fire program coordinator is responsible for planning suppression and fuels reduction assignments, the fire operations specialist assists the various crews with implementation of work assignments, and the fuels program manager oversees the work of both the Burro Mountain Fuels Crew and The Red Mountain Brush Crew. These individuals provide suppression and fuels reduction crews with their primary assignments. Individual crew supervisors combine with the occasional Utah district forester to oversee the execution of these assignments from start to finish.

The Red Mountain Conservation Center's facilities and resources have been similarly upgraded. The addition of the Pat K. Schlobom Wildfire Service Center in 2006 provided a modern office and teaching facility for the entire fire program. It stands in stark contrast to the aged, faded green, and corrugated metal buildings that house the rest of the fire program facilities. Equipment has been improved, especially for the primary fire suppression crews. Fire suppression is a big business. The valuation of this business is particularly visible in the equipment and accessories provided to the suppression crews. It betrays the general hierarchy and roles of the crews operating out of The Red Mountain Conservation Center. As the most experienced, skilled and valued suppression crew, the Red Mountain Hotshots

receive the best equipment while the Red Mountain Brush Crew works with other crews' hand-me-downs.

Fire suppression crews travel all over the country in new, shiny, roomy, white crew buggies equipped with padded leather seats, DVD players, stereo equipment, and Nintendo Wii consoles. Their chainsaws are new and kept in immaculate condition. The fuels reduction crews travel in old, red, bumpy International buggies. They resemble large patty wagons and are affectionately referred to as "asphalt queens" by the suppression crews that formerly traveled in them. These buggies come with amenities like broken chairs, failing transmissions, and faulty heating and cooling systems. The fuels reduction crews use chainsaws that an initial attack crewmember once described to me as "older than you and I." Fire crews get the added incentive of frequent overtime and hazard pay that can raise their base hourly wage to \$20.86. The brush crew is never supposed to work overtime; the work we perform does not garner enough revenue to outweigh the cost of time-and-a-half. Fire suppression also comes with a certain prestige that just does not transfer to fuels reduction. Suppression crews continue to be depicted as heroes in yearly media coverage of western fires and are thus viewed in a similar fashion by the general public (Utah wildland-urban interface fuels coordinator, pers.comm., 7/21/08; Ingalsbee 2000). Firefighters are thought of as rugged individualists, the last true frontiersmen, ready and willing to suppress any fire that might threaten life, property, or resources. Homeowners continue to depend on these idealized fire suppression crews to protect them in any situation. Consequently, America

“suppresses about 97% of all fire starts” (Utah wildland-urban interface fuels coordinator, pers.comm., 7/21/08; former Utah firefighter, pers. comm., 8/10/08).

The wording of t-shirts worn around the center betrays the fixity of the institutional approach to wildfire: forest fire *suppression* and management. Suppression reigns supreme over any other technical approach to fire. Mechanical fuels reduction merely facilitates the continuance of this regime. The Red Mountain Conservation Center, therefore, really only reacts to fires as they occur. We are more heavily invested in fighting fire than actually managing fire. As the fire program coordinator once told me, “We don’t really do prescribed fire here.” The center’s fire program is “about eighty percent self-sufficient, one of the few fire organizations that are primarily self-sufficient.” No doubt this arises from the payment the state receives from other agencies for fire suppression support. “Fightin’ fire is fun,” prestigious, and lucrative, but fuels mitigation work is tedious and largely unprofitable.

The same interests that determine which wildland-urban interface communities are “protected” from wildfire also determine the overall organizational approach to wildfire management. There are powerful economic, political, and cultural incentives to maintain fire suppression as the status quo. Fire suppression is still the standard operating procedure because fire threatens the resource investments of the upper classes and suppression provides prestigious and profitable employment for the individuals whom they depend upon to protect their position within the physical and cultural landscape. Fire suppression facilitates its own consumption as well as the consumption of anything attached to it – aesthetic real estate, government contracts, pork barrel legislation, seasonal labor, catering and sanitation services,

and scientific knowledge. The materialism of the landscape and the materialism of fire management have grown together at all stages in keeping with the edicts of capitalism.

Conclusion

The structural limitations of a management system designed around more than a century of fire suppression leaves very little room for adjustment to the growing realization that regular fire is necessary to the maintenance of the landscape. The case study of Utah is representative of the situation in the entire American West. As the fire environment continues to worsen it requires increasing levels of manpower and resources in a battle that cannot be won with the “archaic firefighting methods” of suppression (Utah wildland-urban interface fuels coordinator, pers.comm., 7/21/08). The act of fire suppression has replaced frequent small-scale ground fires with less frequent and more dangerous conflagrations that are largely uncontrollable despite ever-increasing suppression expenditures (Ingalsbee 2000). The environment is now too highly fueled and too fragmented to introduce an effective new approach to fire management such as comprehensive prescribed or let burn policies. “Most wildlands have become tightly surrounded by developed areas, eliminating the possibility of an unobstructed fire regime” (Franke 2000:15). There is, therefore, no quick fix. Solving the problem would require the same length of time as its creation. Property, resources, and lives would certainly be sacrificed in the effort. We do not have the patience, the perceived moral flexibility, or the necessary support of political economic interest groups for this type of “inaction.” So a fire suppression paradigm, aided by mechanical fuels treatments, remains the dominant institutional approach to fire.

In the next chapter, I further explain mechanical fuels reduction, the most recent technological tool employed to reduce the effects of extended fire suppression. I will examine its utility by relating stories from my season with the Red Mountain Brush Crew and exploring the relationships between the brush crew and interface landowners as expressed by their different social positions and conceptualizations of fuels reduction work.

Chapter 3

“‘Droppin’ Hurtin’ Bombs’: Our Work, Our Crew, Our Office, and Our Customers”

Introduction

“Fire Crews are like Amoxicillin but we are like condoms. We stop the disease before it gets started.” – Tim

The tents are placed in a “professional,” single file line along the cold, frosty ground in an open field of sagebrush and old deer droppings. We do not want to create an eyesore for the invisible neighbors and their largely unoccupied vacation houses at the top of the hill. There is a lone street lamp that lights the darkness along the dirt road, illuminating the blue “Rocket Sanitation” port-a-johns at the edge of the field.

I am lying in my tent after a long, 14-hour day of felling and swamping dead lodgepole pine trees. I cannot sleep. It is too cold to sleep. It is early June, but it has still been snowing off and on here at about 8000 feet of elevation. I am wearing almost all the clothes I brought for this trip, but I am still shivering violently. The damn sleeping bag is too thin and I broke the zipper tossing and turning last night. My feet and hands are tingly and my nose is numb and running with the drip, drip, drip of a leaky faucet. My whole body is completely inside the mummy bag. I do not know what else to do. I have never been this cold before. Very, very slowly, I begin to get more acclimated to the cold and the shivering. Just then it hits me. I have to pee again. This is the worst thing that could happen. I do not want to get up. I cannot get up. It is too damn cold. So I fumble for a twenty ounce Gatorade bottle just outside my sleeping bag. I congratulate myself on my newfound

ingenuity as I proceed to blindly refill the bottle. Not only can I remain in the marginal comfort of my tent, I can also use the refilled bottle as a sort of makeshift bed warmer. Optimism turns to dismay as I realize that twenty ounces is not going to be enough for this job. I am going to have to brave the cold anyway. I close the bottle and prepare for even more cold. When I return, I find myself once again shivering violently, clutching a quickly cooling bottle of my own urine close to my chest, and praying that I will not have to explain this newly developed flavor to anyone in the morning.

They say it takes a strong back and a weak mind to do hard, manual labor. Indeed, the physical nature of the job took its toll on all of us throughout the season. Tim and I both injured our backs, Cymbals broke his toe, Diego sprained his ankle and tweaked his knee, Kadie and TJ got sick, Medina tore his MCL, and by the end of it all, Chunk had lost so much weight that he deserved a new nickname. Yet I am not sure that I agree with this old adage. At least in my experience, it was almost a test of mental strength as much as any physical strength. To get up day after day and perform the same monotonous work of sawing and swamping with the long hours only broken by the anticipation of some upcoming 15 minute break or 30 minute lunch, your mind never seemed to wander too far from wishing that you were possibly anywhere else. At times, the only thing that kept me going was the fact that I enjoyed being around my coworkers. The only way to gain and maintain respect in this field was through a solid work ethic. It was the great equalizer. A strong work ethic was the only true way to prove your manhood in a man's domain. It was a matter of individual pride in a field where there was not always much in which to be proud. So on the frequent

occasions that my body was too sore or my mind was too tired; it was my pride that kept me going. I am sure that it was the same for the rest of the crew. Nobody wanted to be accused of “fuckin’ a dog,” or slacking off.

It was not just a job for me, however; it was also research. I reminded myself of this each night as I attempted to furiously scribble down my field notes under the dim glow of a headlamp while hunkered down in the solitude of my thin sleeping bag and musty tent. I am not exactly sure why the rest of the crew took this job. Most likely, it was out of some youthful sense of adventure combined with the economic allure of a potential fire crew position that would provide regular overtime and hazard pay. Yet there was always something more to it, something that I could never quite put my finger on. It must have lay somewhere between the wilderness ethic of Emerson and Thoreau, the Protestant work ethic of Weber, and James’ moral compulsion to control nature. Something about emerging from the woods after a long day of dirty, tiring work makes one content, not because the work was meaningful or useful, but simply because it was finished. Whatever it was, the brush removal crew would become the proving grounds for most of my coworkers on their way to the fire lines.

The members of the brush crew were from all over the country, but we all came from fairly similar, working class backgrounds and were all in our late teens to mid twenties. A few of us had college degrees but the majority had concluded formal education after high school. Chunk and Diego had been farmers; the rest of us had made our way to the woods from cities. It was a shared dry, sarcastic sense of humor and generally pessimistic outlook

on life, however that seemed to bind us together as a group. These commonalities would serve us well during our season of brush removal. We had all left jobs with higher salaries and better working conditions to become involved in the generally dead-end field of wildland firefighting. The opportunities for management positions within the field are slim and the life cycles of general wildland firefighters are short (Pyne 1989). There are no medical benefits for seasonal firefighters or brush crewmembers for that matter. As a former firefighter explained, “it’s two years later and my body finally feels like it’s getting back to where it needs to be. It’s definitely a young man’s game.” In a field where untrained, community member labor-share effort was valued at a significantly higher per hour rate than both the brush crew supervisor and the general crew, there was little reason to be optimistic about the future¹⁸ (The Independent Sector, “Research: Value of Volunteer Time,” http://www.independentsector.org/programs/research/volunteer_time.html). The best you could hope for was a promotion to fire line duty, a promotion that would last only as long as your body.

In the following, I present an ethnography of the 2008 Red Mountain Brush Crew from our first project in Fruitland to our last project in Sourdough. This detailed description will provide the reader with a better understanding of our fuels reduction work; thereby assisting in the examination of key research themes. Of particular thematic importance are the social relations between the brush crew and landowners in each work setting, the overwhelming masculinity that pervades the concept of our work, and the unfolding tension

¹⁸ Volunteer valuation for purposes of cost-share/labor-share programs was \$19.51/hr, Crew boss averaged \$14.37/hr in base salary, and general crew averaged \$11.57/hr in base salary (See Appendix A).

between the stated goals of fuels reduction and the perceived goals of aesthetic enhancement. It is the interplay of these themes that is primarily responsible for maintaining the wildland-urban interface, as it exists today.

Fruitland

“It’s amazing they can get [electric] power basically anywhere man, I mean even out in the middle of fuckin’ nowhere.” – Medina

The brush removal season begins in the desert, in a very small, rural area of Utah known as Fruitland. Similar to much of Utah, the vast majority of the people are white. The area is a mixture of canyon and plain covered by an endless sea of red dirt, dust, sagebrush, serviceberry, gambel oak, pinyon pine, and juniper. It is a very dry and flammable environment. We are here for an eight-day “spike camp” in which we will begin construction of an approximately 200 foot wide, 23 acre “shaded” fuel break. As we turn off the main road and onto the beige, rock and dirt road leading into Fruitland, I begin to get an awful, foreboding feeling about what lies ahead of us.

The big, red crew buggy is traveling down the bumpy, dirt road at a fair clip. Everyone in the back of the buggy quickly closes the windows when the dust begins to overtake us. Unfortunately, there is nothing we can do to reduce the roughness of the ride. Chunk emptied the air brakes at the last stop, and unbeknownst to anyone, he has forgotten to refill them. The “asphalt queen” is thrashing violently. The pots and pans are clanking around loudly in the overhead storage shelf and the whole crew is bouncing around uncontrollably in their seats as we make our way down the fiercely rutted road. Cymbal’s

profane growls of “fuck, motherfuck” pierce through the other commotion and are followed closely by my own cries of “damn it, what the fuck?” as my head hits the solid, metal storage shelf. We continue on in this manner until we reach the gate leading into our specific community of interest.

It is an orange, metal, swinging gate that guards the only road leading into and out of “The Bandanna Ranch.” Of course, you could always walk around the gate if you really wanted to get in, but I guess its true function is to emphasize the boundary between this specifically recreational community and the rest of Fruitland. To the right of the gate is a small sign fixed in the red dirt announcing “Fruitland Ranchettes for Sale.” Accompanying this sign are two prominent postings reading “Private Property, Access for Bandanna Ranch Only,” and “Private Property – no hunting.” Thankfully, our status as state employees performing a contracted service has garnered us access to this community.

The veritable socioeconomic cornucopia of homes strikes me as we drive through the gate and further down the road. The homes run a broad spectrum ranging from new, log cabins to old trailers and campers, all permanently fixed in a very rustic, desert setting. We pass a new, cherry-colored log cabin and Cymbals shouts, “Yeah we’re right in the middle of sagebrush country, lets make our house out of wood...it’s like those cocksuckers in the mountains with cedar shingles – you cocksuckers should die.” Kadie smartly replies “yeah, but it looks nice.”

The developed landscape becomes slightly more homogeneous as we move closer to the worksite, passing a grass landing strip right off of “Airport Road.” Just then, Medina

spots a cluster of newer, larger log cabins with pretty, green metal roofs and large, bright windows. He comments, “Hey, look over there, that must be where the richer people live.” We stop the buggy in a dusty, rocky, circular turnaround shortly thereafter. This will be our campsite for the project.

Crewmembers later came to question the determination of where to put the fuel break. Kadie asked, “How do they know that the fire will burn on that side, what if it burns on the north side, why did we put it here?” I could not see it at the time, but in hindsight it became clear. We did not need to know where the fire was going to burn; we only needed to ensure what it could not burn. Medina’s cluster of valuable homes was the determining factor in the placement of the fuel break. These homeowners not only have more incentive to take measures to protect their homes, they can also afford to pay the remaining cost-share balance for our services. Consequently, we are protecting them.

We rise early the next morning at 6:00 to begin the workday. The day actually started slightly earlier for the two crewmembers that had to wake up and get breakfast ready. The rest of us were pleasantly roused from our slumber by their rounds of early morning shouting and tent shaking. We all emerge from our tents stiff and sore from the previous day’s work and make our way to the old, white, canvas, 49er style mess tent for a breakfast of oatmeal, cereal, breakfast bars, orange juice, and Western Family instant coffee. It is quiet, dark, and fairly cold inside the tent. No one is saying much. The ten of us are moving about the tent, and each other, with an almost subconscious fluidity. We eat hungrily and then pack our bagged lunches for the day. It is all very quick and orderly, exhibiting the same type of

assembly line procedure as most of our operations. We have to be ready to start work at 7:00. Tim, the brush crew supervisor, and Troy, the fuels program manager, are both there to ensure that we begin our first morning of project work on time. Before we head out of the tent, Medina subtly snorts a line of instant coffee for a little extra pep. It probably tastes better that way.

The workday officially begins before the sun is completely up. Our packs are loaded and ready. Saw teams have been assembled with one saw, one dolmar, and one swamper kit per team. We are all decked out in new, long sleeve Arborwear shirts, brown brush pants, green chainsaw chaps, work boots, white hard hats, safety glasses, work gloves, and ear plugs. This is the last time that any of this stuff will ever be clean. Medina lights up a cigarette and Tim and Chunk put in their first wintergreen Skoal dips of the day as we walk in a single file line back down to where we stopped working yesterday. We spread out in our two-man saw teams across the width of the fuel break. I am working with Farley again today. He will start the day on the saw and I will swamp for him. Farley has more experience on the saw. Until last week at The Colonies, I had never touched a chainsaw before in my life and I am still not comfortable with it. I have not yet developed the technique or the muscular endurance to effectively run a saw throughout a ten-hour day. Farley starts up and begins cutting a clump of serviceberry while I follow closely behind him to pick up and pile the cut debris. I grasp a good armful of spindly branches but lose over half on the way up as the uncut branches pull many of the cut branches out of my arms and

back onto the ground. Such is the life of the desert swamper. It is only the second day of our first project, and the three and a half month season is beginning to look like a very long time.

The landscape behind us has been reduced to large 10x10x10 piles of sagebrush, gambel oak, serviceberry, and juniper debris with decreasingly abundant yellow-flagged, lowly pruned, pinyon pines serving as the “shaded” portion of the fuel break. When we started this fuel break we were supposed to leave “islands” of vegetation interspersed throughout to maintain the aesthetic appeal of the landscape, but now it is becoming more and more of a clearcut. Farley realizes this discrepancy and questions Tim, “Hey are we still supposed to be leaving islands as we go, you know, for shade?” Tim replies, “No, I think that the pines are enough, now that we are off the road it doesn’t really matter.” This conversation brings me to the precipice of my first working definition for the wildland-urban interface: the road or home closest to wherever we are working. In order to appease many community homeowners, it is necessary that all operations exhibit some sort of aesthetic, “curb appeal.” “Aesthetics are key.” As one district forester would later advise “just make sure it looks good from the road.” It really does not matter whether these aesthetic conciliations serve any functional purpose, as long as the homeowners are satisfied.

Cymbals overhears part of our conversation as he takes a break to sharpen the chain on his saw. He questions “shaded, is that what this is supposed to be?” As he continues sharpening, he adds, “You know the work we’re doing here really goes against my political beliefs, I think I have a fuckin’ moral issue with cutting this stuff.” Nobody really seems to

understand what a shaded fuel break is, or why we seem to be diverging from the original plan and steadily increasing the extent of removal.

The conversation ends and I prepare to take my turn on the chainsaw. I tug violently at the pull-cord to start the saw. The cord is slightly tangled within its housing and it is becoming increasingly difficult to start the saw. The saw finally starts after about a dozen tugs and a plethora of obscenities. I bend down about half the length of my tall, lanky frame and attempt to control most of the weight of the thirty-pound saw by resting my right elbow on my right thigh as I plunge the blade of the saw into a dense thicket of gambel oak. Almost immediately, I hear the telltale “zhing” sound of the chain being thrown from the bar. I yell “fuck,” look at the saw, look at Farley, and turn the saw off. Now I have to move to the ground to take the housing off the saw and put the chain back on the bar. Everywhere else the scene is the same. Dust and dirt whirl in the air and golden sparks from the occasional nicked rock hover close to the ground. Our ears quickly become attuned to the intermittent “zhing” of thrown chains. The chainsaws are rarely buzzing with their characteristic bumblebee unison. Chainsaws are just not designed to cut the type of small, dirty wood that we are encountering. As a result, we all seem to be stopping about every fifteen minutes to sharpen, tighten, or reapply the chain. At any given time, only one or two of the five work teams may actually be running a saw. It makes for a slow and tedious progression across the rambling desert landscape.

I am wondering if management is using this project as a way to weed out the hacks early in the season. I assume they consider the anthropology graduate student to be the

leader of the hacks. We are all wondering whether there is some better way to construct this fuel break. Kadie says “they should just get a back hoe out here.” Cymbals throws another chain again and exclaims, “Man, fuck Fruitland. This shit fuckin’ sucks.” Medina takes a long drink from his State issued, rubbing alcohol style water bottle and announces to everyone within ear shot, “I’m a goin’ back to work masa. This is like inmate labor.”

It takes us about five; ten-hour days to finish the portion of the fuel break lying on the western side of the road. It is an area of about seven acres. The old age of the equipment and the unforgiving environment has caused a number of our saws to completely break down. A few of us have had to use Pulaskis¹⁹ to help finish this portion of the fuel break. Despite our difficulties and inexperience, we have been making pretty good progress, especially when the terrain is taken into consideration. However, we still are not sure if we will be able to start on the other side of the fuel break yet. The Utah forester for this district told us at the beginning of the project that the owner of the property on the east side of the road is “out in the Atlantic doing some type of survival stuff and he can’t be reached.” We have yet to officially gain access to this property.

With this limitation in mind, we begin what the Troy refers to as a “modified mopup.” Mopup is normally a technique used in fire suppression to ensure that all traces of the fire have been put out or at least contained. Troy’s description of fireline mopup suggests a very disciplined, Fordist type of operation: “They line up like the military and when one person starts moving you all have to start moving and you have to keep up. The head guy

¹⁹ A Pulaski is a hand tool typically used on Western firelines. It combines an ax and a hoe on one head.

says ‘moving’ and everyone starts going and when you need to stop for something, you call out ‘holding.’” We conduct our mopup in a similar fashion, spreading out in a single file line across the width of the fuel break and starting and stopping only when Troy indicates.

The brush crew mopup, however, is quite different from that of a fire crew. It involves retracing every step of the fuel break to ensure the complete destruction of targeted vegetation, piling of any still loose vegetation, and the inspection of all brush piles to ensure that they are all “tight,” well spaced, and safely away from the sides of the fuel break. Occasionally we must stop to “consolidate” two smaller, poorly spaced brush piles or to “tighten” up a pile that looks unwieldy. Both of these processes involve the uncomfortable act of forcefully pushing against or diving into a pile of tough, prickly brush. This attention to the condition of the brush piles becomes important when and if they are burned at a later date. The complete destruction and piling of the little loose vegetation that still exists is largely an exercise in aesthetics. It amounts to occasionally revving and swinging a chainsaw at a piece of vegetation too small to effectively cut or chucking a tiny piece of debris in the general vicinity of a pile. The goal of all of this is to create a “clean,” orderly environment. I am not sure what this really means; it actually looked a lot “cleaner” before we started.

The modified mopup takes us to the end of our fifth day of work. This side of the fuel break is now complete and as Troy says “we’ll never have to look at it again.” We are now all back at the campsite, busily going about our “rehab” duties. We are cleaning, sharpening, and refueling the saws. We are also replenishing our swamper kits and refilling

the dolmars with engine mix and bar oil. Upon completion of rehab, Cymbals and Tim walk over to the edge of the hill and inspect our work below. Tim sarcastically proclaims, “Alright, yeah, fuck you nature” and Cymbals adds, “We are some devastatin’ motherfuckers, lookin’ back down the hill at all the stuff we’ve done.” Medina concurs, saying “yeah we destroyed some stuff today.” Cymbals has begun to make peace with his moral issues regarding the destruction of nature as he has seemingly turned his attentions to mastering the technical aspects of the job. Of course, our job is to essentially destroy certain portions of the landscape to protect others, and as such, it has been a good five days of work.

It has been a rigorous eight days in the desert, but I have learned much about the field of fire management. Socioeconomic status definitely figures into the equation when determining which landowners are protected from wildfire. We passed many old trailers and campers on the way into Bandanna Ranch so that we could work on protecting newer, larger log cabins. Those with nicer homes and more disposable income certainly have both the incentive and means to pay cost-share dividends. A former wildland firefighter would later explain, “I am not exactly sure why this occurs. It may be that the more affluent communities have more resources to get plans in place. If you have resources, you can get the government to help you.”

This difference in socioeconomic status may go a long way toward explaining the need for aesthetic conciliations. We try to maintain a sense of aesthetic value in the midst of authorized destruction of the natural environment. It is certain that these aesthetic efforts serve no functional role in the mitigation of wildfire, but they are pleasing to our clients,

those who are so invested in the desert scenery. In the end, our work is supposed to leave the community satisfied and the chain of command helps to ensure that this is so.

All aspects of our work are controlled by a militarization of the workforce. It tells us what to do, when to do it, how to do it, and why we should. We are managed through a hierarchy of influence. The district forester provides us with initial instructions for our project based upon consultations with the community association. Tim is primarily responsible for the implementation of these instructions while Troy is responsible for ensuring that Tim is responsible. The plans, however, are always open to new modifications by the community. There is an additional hierarchy that structures the general ranks of the crew. The sawyer is always superior to the swamper, even though these roles change regularly throughout the day. The sawyer normally decides what and how much to cut and the swamper merely backs him up. All operations are thus very formulaic. We march to worksites in straight lines. We work in a straight line across the width of the fuel break to ensure equal coverage. We return to camp in a straight line where we retire to tents that have also been set up in straight lines. It is all designed to give a sense of organization, professionalism, and discipline. The crew needs to be disciplined to ensure that we will do the hard work necessary to discipline an undisciplined environment.

The Manor Lands

“If someone is going to take the time to come all the way out here to steal, they’re not going to see these tiny gates and say well geese, I didn’t expect this, guess I’d better just go on back home. You could either cut the chain or just walk around them.” – Tim

Tim has stepped out of the “sup” truck to unlock the big, red, swinging, metal gate that blocks the entrance to “The Manor Lands.” The Manor Lands is a private vacation community at the very northwestern tip of Utah near the Wyoming border. It is located at an altitude of approximately 8000 feet, so even though it is June, it is still pretty cold outside. Snow has been forecasted for the area. It will come and we will work through it.

Once again, we are here to construct a “shaded” fuel break. This time, however, it should be more shaded than the fuel break we constructed in Fruitland. We are only supposed to be falling and limbing dead lodgepole pine trees. Yet, from the looks of the stands located just off the dusty, beige dirt road, it seems that we will have plenty of work to do. As Cymbals characterizes it, “this place is dead like old lady vagina.” Indeed, the entire northwestern area of Utah has been suffering from a massive beetle-induced killing of their lodgepole pines for a number of years. Years of fire suppression and largely inactive forest management have left the woods full of the over mature trees that are most susceptible to beetle infestation. The populations of beetles and dead fuels have, therefore, grown significantly. It is a good thing that the Red Mountain Brush Crew is here to make a good show of taxpayer dollars at work. We are trimming the hedges when we should be scorching the forests.

We pass by a few impressive, log cabins on the way to our campsite. The lots in The Manor Lands “are not small” according to Kadie, and Cymbals says “The homes out here are pretty expensive for being out in the middle of butt fuck Egypt. I googled it to check the weather for the week and it came back with real estate values too. Two bedrooms out here are like \$250,000.” The homes are typically of the new, yet seemingly old, log cabin variety. They are spaced at intervals of at least a few acres and often cloaked in a thick covering of trees and vegetation, so one may travel a long way before seeing any signs of human development in this community. This is probably one of the appeals to living out here, but it often makes it hard for a worker such as me to figure out what I am protecting. As we near the campsite and worksite, I ask Medina “where are the homes we are supposed to be protecting?” He replies, “I don’t know, but you know, that’s a good question.” The residents of this community are equally elusive. We only meet one middle-aged, white couple during our ten days of work in The Manor Lands.

The campsite at The Manor Lands is located in an open field of sagebrush and deer droppings. There is a lone brick house partially hidden behind a clump of trees on the hill above the field. It is a large house with many windows and a porch located off the back of both the first and second floors. There is a corrugated, metal storage facility with two garage bays located to the opposite side of the field. The Kings Mountain Initial Attack Crew (KMIA) is working on a hill of densely spaced aspen and lodgepole pine trees just above this storage facility. A slow start to the fire season has them relegated to doing project work with us this week. They are spread across the thirty-five degree slope in teams of three, felling

and swamping dead lodgepoles. We dismount from our buggy and prepare to begin working to the left of KMIA on the same hill. Kadie and Diego are selected to help KMIA with the dirty, unenviable task of chipping cut debris in the big, yellow Vermeer chipper. Kadie proclaims “the B in Brush Crew stands for bitches” as he and Diego make their way over to the chipper. The rest of us split up into two man saw teams and march to the hill.

It is the second day of The Manor Lands Project. It snowed off and on last night and it is snowing again this morning. It is cold, in the low thirties. I am trying to stand in the small section of sun peaking out over the corrugated metal storage building while we wait for Tim to give us our instructions for the day. My feet and hands are almost numb and my nose is cold and dripping. I am jumping up and down ready to go to work so that I can warm up a little. Tim puts in a dip and addresses us:

“We are going to basically be doing the same thing as yesterday, just moving farther down the hill. Remember to be careful with your spacing and only take out the dead trees. Remember that you can tell which ones are dead by the red needles. Don’t pay any attention to the paint on the bark. They’ve been marked so many times it’s impossible to tell what it means.”

Chunk puts in a dip while Medina snuffs out a lit cigarette butt under his boot. We break up into two man saw teams and climb back up the now slippery, snowy hill. I am working with Cymbals today in the middle of the line that the group has formed across the width of our portion of the hill. The density of both the trees and workers on the hill makes our operations more difficult and dangerous than normal. Working on the hill today is an exercise in sensory overload. I can feel the cold all over my body and see it in my breath and on my partially fogged safety glasses. The sights and sounds of work are all around me.

From every direction I hear crewmembers' shouts of "backcut" and "downhill" piercing through the bumblebee humming of chainsaws working in unison. Everywhere, holding wood is snapping with a "crack" as trees make their way to the ground with a "woosh" through the air and a final reverberating "thud" on the forest floor.

Cymbals yells "fuck, oh fuck me" as the tree he was trying to fall gets snagged up in the dense canopy. We are not having the greatest luck getting trees to the ground this morning. The density of the forest is making things hard on us. Many of the dead lodgepole pines do not have a clear path to the ground. Other, live trees are blocking them. The aspens are another story altogether. As Tim explained it, "They're tricky fuckers because they're light and don't have much lean so they don't want to fall down." So we are dealing with a lot of snags. A snag is a common, yet very dangerous situation in which one tree gets caught on another tree on its way down. This forces the sawyer to perform a "ladder cut" on the unsuccessfully fallen tree. The ladder cut is made at about a forty-five degree angle across approximately eighty percent of the bole. The saw is then removed from the tree and the cut is finished from the opposite side to avoid pinching the blade when the tree starts to "release." Upon release, the half-fallen tree will either roll off to one side of the holding tree or slide straight back and remain standing. Either situation results in the sawyer scampering hurriedly away from the scene because there is always a real chance that his estimations were wrong. Cymbals finishes his third ladder cut and again the tree just slides straight back and does not make it to the ground. He looks at me and shakes his head saying, "Sorry J, I

fuckin' suck this morning." In the distance I hear Chunk exclaim, "You cunt, you whore of a cunt, fuck my beard." It sounds like someone else is having the same problem.

We eventually get the tree down and turn our attention to limbing it up. The lodgepole pine is nothing but limbs, mostly dead limbs. They retain their dead limbs. As a result, the limbs extend from the top of the tree almost to the forest floor. This branching pattern results in the type of "ladder" fuels that can facilitate the metamorphosis of a less intense ground fire into a very intense crown fire. These characteristics combined with thin bark and resinous wood make lodgepole pine "one of the principal fire species of the American West" (Preston and Braham 2002:81). More importantly for the brush crew, however, it makes the lodgepole pine a pain to limb and swamp. Cymbals must drag the saw across the entire length of the bole while I follow closely behind collecting the branches. We finish with two large piles of limbs, one for each side of the tree, and what looks like a giant toothpick lying between the two piles. When Cymbals is done he says, "I gotta sit down for a minute. That stuff is so nerve wracking, it just makes me tired."

Despite our collective difficulties, however, everyone seems to be enjoying the challenge of falling bigger timber. There is a certain appeal to it. The forest is alive with the sounds of falling trees and celebratory cries of "give 'er the beans," "yeeeeeah," "falling," and numerous sexualized expletives. There is a certain sense of accomplishment in being able to successfully direct and control the fall of a large tree. The big trees always get cut first; no one wants to fool with the little ones. As Tim says, "there's no glory in that." It is truly a great example of men conquering nature.

Work continues in much the same way until Cymbals and I am moved to a fairly secluded, side hill area following our thirty-minute lunch break. This area is slightly more open because it is comprised of larger lodgepoles. The trees have an average diameter of about twenty-three inches. Despite the relative openness of the stand, we are still faced with the same difficulties. Many of the trees do not have a clear path to the ground. Cymbals and I decide to throw caution to the wind and experiment with a method of felling that has no institutional name and is not covered in any training manual. I call it “dominoing” but most would call it ill advised. It is a somewhat functional method when used as a last resort but Cymbals and I are using it as more of a macho game to test our felling technique and to break up the monotony of the day.

We mark out four dead trees that are standing in a manner that would make it difficult to fall them one by one without creating a snag. We will attempt to bring them down all at once by falling one into the other just like dominos. Cymbals starts at the most downhill tree. He begins by making a full face cut and a full slant cut to remove a wedge of wood from the front of the tree. He then moves to the opposite side of the tree and makes a partial back cut, over half way through the tree. The tree is still standing, but only on a thin thread of holding wood. Cymbals moves to the next two trees and performs the same procedure. We then move to the most uphill tree. Cymbals lines up his face cut so that this tree will be felled into the next targeted tree. He makes his face cut and slant cut to remove a wedge of wood from the front of the tree. He then yells “back cut, downhill” and glances over at me as he prepares to make his back cut. He plunges the saw into the wood and then begins

alternating glances at the top of the tree, the saw, and me. He wants to know when the tree starts moving, if the saw is still properly aligned, and when he should stop cutting to maintain proper holding wood. He has cut through about eighty-five percent of the bole when he makes one final glance at me and I hold up a closed fist and yell “falling” to indicate that he should remove the saw and “escape” the tree. The holding wood cracks and the tree falls with a “woosh” into the second tree where it hangs snagged in mid-air. I yell, “Fuck, oh fuck, this is totally bad. I knew I should have told you to make that last back cut a little bigger.” Cymbals turns off the saw and we both stand back at a distance.

This is a very dangerous situation. The only way to fix it is to ladder cut the most uphill tree. We cannot mess with any of the other, partially cut trees. This action could leave us open to being crushed by the first tree. We decide wait to see if the weight of the first tree will eventually cause the partially cut second tree to fall. Meanwhile, we discuss a plan in the very real likelihood that nothing else happens. Cymbals concludes the meeting with, “what can I say, I got no fuckin’ luck today J.” Just as he finishes this statement, the weight of the first tree breaks the holding wood of the second tree. The first tree falls to the ground as the second tree snaps off its holding wood and falls into the third, this cracks the holding wood on the third tree, causing it to fall into, and subsequently knock over, the fourth tree. The operation is actually a success. Cymbals exclaims, “Yeah, fuck yeah, I could feel the fuckin’ vibrations when those things hit!” I reply, “Yeah man, I’m just grateful they finally came down. I’d a felt real bad if that second tree had held the whole thing up.” I pick up the saw and we mark out three more trees to domino. The operation goes off without a hitch this

time. We transition back to falling trees in the conventional manner soon thereafter.

Dominoing is fun, but “it’s a bitch to swamp when you’re done.”

Later, Tim grabs a group of us for a special assignment before the end of the workday. He has a couple of rakes and McLeods²⁰ in his hand. The manager of the community has just told him that we need to clean up the small twigs and needles that have been added to the forest floor as a result of our felling operations. Tim relates, “We need to make things look good, especially from the road.” Medina quickly questions the necessity of this action, asking Tim “does he not realize that this is a forest, this stuff is always on the ground.” Tim replies with a combination of sarcasm and aggravation “apparently not.” Cymbals chimes in, “This front part looked a hell of a lot better from the road before we started cutting. I mean I can see cutting down dead trees to prevent fire, but raking up a tiny part of the forest floor doesn’t make any sense.” Medina seconds his opinion saying, “Yeah this shit was here before we started and it’ll be back in no time.” Medina looks at me and says, “Diggin’ holes and fillin’ ‘em back up again eh?” I smile at Medina and the absurdity of the assignment. Our objections do not really matter however. We soon find ourselves raking up the area of forest floor nearest the road, or more accurately, moving needles and twigs around with our boots and kicking them under fallen logs.

The twelve-hour workday is just about over and the whole crew is meeting up at the bottom of the hill by the metal storage facility. Diego is talking with Tim about our progress. He asks, “Does it look good?” Tim replies, “Yeah it looks good man, I don’t see a single

²⁰ A fireline tool, essentially an oversized metal rake.

dead tree back up there.” It would be more accurate for Tim to say that he does not see a single standing dead tree, but we all know what he means. All the dead trees are now lying on the ground in a crisscrossed mass of wooden carnage. Medina then sarcastically quips, “Yeah but I wonder if anyone will notice all those twigs and leaves on the ground?” Cymbals and I share a tired laugh as we gather our equipment and prepare to head back to camp for rehab.

We leave the worksite walking in a single file line back to camp. The raking assignment has gotten the wheels turning in my head. Chunk is walking right in front of me, so I decide to ask him a question about the functionality of this project. I call ahead to him and ask, “So how much do you think this operation really protects against fire?” Chunk replies, “Oh I don’t think this protects against fire at all. I mean that fuel break like we did down in Fruitland that was reasonable. This is just people getting the State to pay for tree removal.” I ask, “So it’s more of an aesthetic type thing?” Chunk concurs, “Oh definitely, they’re just using the State so they don’t have to pay for tree removal.”

Later that night, we are all sitting around the campfire after dinner when a couple of guys from KMIA come walking up to warm themselves. Our crew quickly seizes this opportunity to ask experienced firefighters what it is like to work the fire lines. Most significant to the conversation is the discussion of money. We always want to know how much the long hours of overtime and hazard pay can add up to throughout the course of a season. The KMIA guys’ answers to our questions reveal a seemingly backwards orientation to fire and the fire season:

“It’s hard to talk to people about fire season, I feel like I end up lying to them you know, because when I tell them that there haven’t been many fires this year they’re like “oh so its been a good fire season?” “Well not so much, not for me personally.” “Hey man, I just tell ‘em the truth. Everybody that knows me knows that I always say the more black on the ground, the more green in my pocket.”

Money is extremely important to all individuals in fire management. While there is no possibility that one will get rich working in this field and many brush crewmembers and firefighters would cite working in nature as their primary motivation for employment, it remains significant that there is extra money to be made through hard, extended work. It augments the cult of masculinity that pervades the field. Working hard at man’s work is valued above all else and the ability to work sixteen hours a day for weeks at a time proves a man’s worth while putting extra cash in his pocket. Therefore, fire crew veterans are seen as more accomplished and initially more masculine than brush crewmembers. They have already proven their ability to battle the unforgiving natural opponent – fire. By valuing these abilities, we are all harkening back to the beginnings of the nation; conquering a feminized nature with our own brute strength, know-how, and technological advancement. Lewd sexual discussions and metaphors and gratuitous language only reinforce the increasingly masculine values that spur us to exploit Mother Nature for material gain (Merchant 1979).

Fire economics carries over just as easily at the institutional level. It drives the overall organizational approach to fire management. Fuels mitigation work really does not provide the individual crewmember or the contributing agency with much economic incentive. There is no overtime or hazard pay and operations are performed at, or slightly

above cost. There is, however, money to be made in fire suppression. An individual crewmember can make upwards of \$40,000 in a “good” six-month season by accumulating vast amounts of overtime and hazard pay. Yet, this money is not only made by the individual crewmembers but also by the State and Federal agencies that offer cooperative, compensated assistance to one another. The equipment, clothing, catering, and lavatory companies that outfit fire crews and fire camps similarly profit from suppression activities. Fire suppression also preserves interface communities and their valued scenery. It facilitates capital accumulation on a grand scale. Resultantly, there is a powerful economic incentive to maintain the masculine ethic of fire suppression as the primary cultural technique for dealing with fire in the environment.

Wolf Mountain

“Workin’ in rich people’s back yards again.” – Dan

We pull up in front of the driveway of another home in the neighborhood that surrounds the Wolf Mountain Ski Resort. Troy gets out of the Sup truck and walks back to the big, yellow Vermeer chipper he is hauling. He disengages the clutch and pushes the motor back to full speed. The chipper puffs back to life with a cloud of black diesel exhaust while the rest of the crew walks up to it from the last stop where we were working. This is a FIREWISE community. They have met their cost share and/or labor share burden. Now, in accordance with the National Fire Plan and its funding policies, the Red Mountain Brush Crew has been called upon to finish the fuels reduction work the community started. Our presence has been expected, and indeed, announced on the yellow, laminated flyers posted

below most of the stop signs in the neighborhood. They read, “Brush disposal crew will be here June 24-27.” The community has done most of the cutting of the hazardous and unsightly debris that they want removed from their yards. There are now piles of brush lining the streets. Most of these piles come with cardboard signs fixed to branches that instruct us to “please chip the dead brush, we want to keep our chips, thank you ☺.” We are simply cleaning up an old mess as we gradually proceed from house to house, stopping intermittently to pick up and chip the normally small piles of twisted, tangled branches and debris that line the streets and driveways of participating homeowners.

The chipper is now roaring at full speed. It is nearly deafening even with earplugs. As we approach the next pile Farley shouts, “I feel like a garbage man, we just need to hang off the back of the chipper.” I smile at him as I bend down and attempt to grab a manageable armful of brush. Unfortunately this rarely ever occurs. I always end up losing about half my load on the way up or trying to lift an area that brings the whole pile with me. I can never get it right. I cannot get the technique down, nor can I efficiently load the chipper. I end up dropping the pile at the back of the loading deck and then forcing the jumbled mass through the narrow opening and into the feeder drums. Once I finally succeed in my efforts, I tend to pause at the side for a momentary celebration that lasts just long enough for me to be smacked in the butt or leg by one of the longer, thicker branches that are thrashing around violently while being sucked into the chipper. This is exactly what caused Medina to tear the medial collateral ligament in his knee, and it is a not so subtle reminder to “get the hell out of the way” once you finish loading. I finally retreat from the chipper rubbing my leg and butt

and sneezing from the sawdust and dirt that fills the air. Couple the difficulty and monotony of the operation with the dust, dirt, and noise being emitted from the chipper and it all combines for a very tiring, aggravating ten-hour workday.

I walk over to Troy who has stepped back to assess the operation. I have my doubts about the usefulness of this job so I decide to ask him, “Doesn’t it really defeat the purpose if they are just going to use the chips around the house?” Troy replies, “No, not really, because chips aren’t as flammable, once they get wet they’re basically like mulch, like a sponge.” It seems like a fairly reasonable explanation but I am still not fully convinced. Wood chips have a much higher surface area to volume ratio than branches or logs. Theoretically, the chips should dry out more quickly and light more easily, regardless of any previous wetting. It feels like most of the community members are using the project as an aesthetic enhancement.

I end my moment of contemplation and head back to work because I am not being paid to think. Tim and a couple of the other crewmembers are standing by the pile, inspecting the little, red abrasions that line his forearms and lower biceps. They result from repeatedly picking up brush and loading it in the chipper. We all have them but Tim’s are especially bad because he refuses to wear a long sleeve shirt. A couple of his cuts are trickling blood and Cymbals remarks “hey man, you look like a suicide king.” Tim replies, “I consider these a badge of honor.” Over at the chipper, Dan is loading a pile of brush with a bandanna tied around his face in an effort to reduce the amount of grime entering his system.

Chunk yells over to him, “Hey Brokeback Mountain, what’s with the bandanna?” Dan replies, “I’m just tired of breathing this stuff in.” The rest of the crew begins to laugh at Dan and until the laughs transition into a series of strained hacks and wheezes. It is safe to say that no one enjoys this project. “Chipping fuckin’ sucks.”

The day is not over however. We have about three more hours left in the sun. We finish our last pile on the road and ride over to the street nearest the FIREWISE program coordinator’s home. A petite, middle-aged, white woman wearing old khaki shorts, a T-shirt, and work gloves is waiting for us when we arrive. There is an intimidating, fifty-yard long pile of gambel oak and maple brush lining the street leading up to her house. We immediately get out of the buggy and begin chipping this pile while Tim goes over to talk to the woman. Tim calls for Cymbals to get the big, Stihl weed whacker and come over to meet with him and the woman. Cymbals has been given the task of cutting down the knee-high herbaceous grasses and forbs that line the sides of the roads and the entrances to the driveways. Now Tim comes over to the Sup truck to retrieve Dan and a saw. Tim and Dan walk back down the road with the woman to cut down a few more sapling-sized trees near the road. Tim cuts down the trees, Dan swamps, and the woman directs the action in between curious, branch-laden freights back and forth to the brush pile nearest her home. I am under the impression that she is trying to be helpful but Cymbals has a different interpretation. “She just wants more chips for herself.”

The rest of us continue with the chipping operation and work goes on in much the same manner until the chipper brakes down around four in the afternoon. A four-inch wide log has become lodged in the cutting mechanism. The chipper has to be shut down and opened up in order to remove the log. It is not an easy task. Kadie has had to climb up into the chipper and now has two-thirds of his body inside tugging at the log and then beating it with a hammer in an effort to pry it loose, but it is not budging. Chunk suggests that we should use a crowbar but Kadie is getting irritated. From inside the chipper we hear Kadie shout, "Hey, I don't see your fat ass in here." Then Kadie jokingly repeats "you know what might work is a crowbar." Of course we do not have one on the Sup truck or the buggy so we must borrow one from the woman. I am sent back with her to retrieve it from her garage. It is a fortuitous opportunity for me to discuss fuels mitigation and the FIREWISE program with one of the actual wildland-urban interface homeowners with which we normally have little contact. As we walk up the hill towards her house I ask:

"Are you in the FIREWISE Program?" She replies, "Yes, I've been the program coordinator for the past 5 years. This is our fourth chipping in about two and half years. We've been trying to do two chippings per year. The fireman told us that if they had a choice between houses that looked like they had been worked on and houses that hadn't, they would choose the ones that had." I say, "Yeah, I read where they mark red Xs and green checks on the mailboxes for the ones that they will and won't protect." The woman replies, "They have to, they have to." I ask "has it burned up here recently?" She says "It hasn't burned up here in a long time, like since 1895, that's why they're worried, it seems like its due, so we've been working on it." I follow, "So you're just cutting the dead stuff?" She replies, "Yes and the underbrush, you see that area, [pointing to an oak brush "island" that has been thinned of the green underbrush and smaller maples and oaks] it was covered in shrubs, you know, the ladder fuels." I ask "What about aesthetic considerations, would you say that that is an important, motivating factor?" She replies "No, it's mostly for fire prevention but we also like the way it looks too, it was thick, like right there." I follow, "So have you done any prescribed burning out here?" She replies,

“not yet, we’re scared to do it, we’ve got to get ready first, once we get a fire break in here then we’ll do some burning, we’ve got to get our, what do you call it, check...up, because it’s all based on “Sweat Equity” [labor and cost share]. I end with a final question, “So it’s state funded?” She says, “Yes...it’s state funded.”

We return to the chipper with crowbar in hand. Chunk was right; this is the perfect tool for the job. Kadie is now able to quickly dislodge the log from the cutting mechanism. The chipper is closed up and turned back on. Work continues as normal for the rest of the day.

As we ride back to camp at the end of the day, I decide to ask some of the other crewmembers their opinion regarding the effectiveness of this job for the stated goal of fire mitigation. I want to compare their answers to that of the community FIREWISE coordinator. I question Kadie “So what do you think of this job?” He quickly replies, “This is bullshit, its bullshit man, it’s pointless.” I follow, “you mean it’s not useful?” He says, “Yeah, come cut down some dead stuff and shit I don’t want. Come thin the shrubs on the roadside. That shit’s not gonna burn, I’m not a fuckin’ lawn service.” Then Cymbals adds:

“I don’t get why the state pays for it. In California, if the weeds in your yard or something are a fire hazard, you get ticketed for it, and you get a ticket each week until you clean it up. If you have enough money to live way the fuck out in the middle of nowhere, in a wooded area, you should learn how to use a chainsaw or hire someone to come out and take care of your yard.”

Other crewmembers quietly nod in agreement to express their shared sentiments. The crew believes that we are merely beautifying the landscape under the guise of fuels reduction.

Back at the camp, after a hearty spaghetti and corn dinner, we are all sitting around on green picnic tables chewing the fat. The Burro Mountain Crew has been working in another community very close to the Wolf Mountain Ski Resort and is now camping right beside us.

They were initially supposed to construct a firebreak, but now they have run into issues with some of the community homeowners situated next to the proposed site of the firebreak. The unhappy homeowners thought that only the dead brush would be cut. It is now apparent that they are not too pleased with the idea of a clearcut running through their backyards. They are not willing to commit to this type of aesthetic reduction, even in the name of home protection. Therefore, Burro Mountain has been “kicked off” the project until the homeowners association can hold an “emergency” meeting to discuss and vote on the issue. As Troy sees it “The problem isn’t fire, the problem is that people want to put their houses in the woods and not take the proper defensive measures to protect them.” He adds, “I don’t get it, the stuff grows back in about four years, and most of the time they can’t even see the firebreak from their property.” Cymbals quips “I’d like to go have a Roman candle shootout in those fuckers’ backyards...show them the real point of a firebreak.” I laugh at Cymbals and nod at Troy as I retire to the teal “John Co.” port-a-johns to wash a combination of moist, brown sawdust and dark, black diesel exhaust from my face and ears, and remove the hardened black boogers that now obstruct my breathing. I then pause to ponder the troubles of the Burro Mountain firebreak project from inside the relative privacy of an abnormally clean portable toilet.

The cancellation of the Burro Mountain Crew’s firebreak project, as well as the garbage collection type quality of our own project, revealed the ever-present tension between aesthetics and functionality in fuels reduction work. At this point, my coworkers and I had become justifiably skeptical as to the true benefits of our work. We did not share the

community FIREWISE coordinator's sentiments regarding the value of this project. We did not see the usefulness in chipping generally small, intermittent piles of brush. The wildland-urban interface fuels coordinator I interviewed earlier in the season explained that the first site visits were never very effective, that they were just about getting people started on something in anticipation of multiple returns (pers. comm., 7/21/08). Yet, this was the fourth project in this community and it seemed that all they had addressed thus far was the vegetation near the road. The road, however, was not a designated firebreak. We only performed defensible space²¹ operations around two houses during the course of our project. Even these efforts were incomplete because we did not reduce fuels on all sides of the houses.

The FIREWISE coordinator's home was the only well protected site in the whole area. The amount of vegetation surrounding the other homes should have inspired more thorough defensible space operations for the rest of the community, but it did not. The cardboard signs that lined the piles of brush throughout the neighborhood were another reason to believe that the community was more interested in creating wood chips for landscaping than reducing fuels to address fire vulnerability. The premature ending of the Burro Mountain firebreak corroborated our suspicions about our own project. Some residents were making good faith efforts at reducing wildfire susceptibility while the rest were either using the brush crew pick-up days to rid themselves of small piles of dying vegetation that had become blemishes on their property or simply not participating at all. If

²¹ Ideally, reducing fuels within a 100-foot radius of a structure to help prevent fire from burning the structure.

this FIREWISE community program was run in a fashion similar to most homeowner associations, then we should have expected this type of limited participation with a select group of individuals taking the lead while the rest of the community remained unenthusiastic or completely uninformed (Low 2003). In this instance, the community had not co-opted management goals out of any sense of spite. Yet, the power of apathy proved formidable.

Moosehollow

“Oh, what’s that J? You don’t want me to drop some hurtin’ bombs on you now do you? You know I didn’t get these guns from readin’ books.” – Chunk

Chunk pulls the buggy off I-80, one exit before Park City. It is 8:45 on a Tuesday morning. We are back for our second, four-day commuter project at what Kadie sarcastically refers to as “Mooseknuckle.” We take a left at the light and head towards “The Jeremy Ranch,” a private community with its own golf course. There is a black sign in front of the old corral style fence that lines The Jeremy Ranch golfing community. It reads “Private, members only.” The community is quite stunning, made up of large, tightly spaced, two-story, earth toned, stucco houses and log cabins with an eighteen hole golf course dividing the two main residential sections of the neighborhood. The course has lush green grass and a smattering of small aspen trees. The rough is short and well groomed and the sand traps are very white, fairly small, and infrequent. There are little white golf carts on every hole and there are numerous middle-aged white men and women out on the course dressed in pastel colored three-button Polo shirts and khakis. This recreational workweek scene seems unfair

considering the work we are about to perform. Cymbals exclaims, “Get a fuckin job. There are assholes playing golf,” as we pass by the driving range and putting green areas.

Though The Jeremy Ranch seems like our typical work environment, we are actually headed somewhere else. We are going higher, to a gated community called “Moosehollow.” The socioeconomic gradient becomes apparent as we crawl up the mountain in the dilapidated red buggy and haggard Sup truck. The houses are getting bigger and newer as we make our way up streets with nature inspired names like “Daybreaker Drive,” “Saddleback Road,” “Silver Spur Road,” and “Lone Pine Road.” The architectural styles are still very similar to those of The Jeremy Ranch, but the homes on this part of the hill have two-car or three-car garages, larger lots, terracotta roofs, sparkling windows, and front porch columns fashioned out of stained tree boles. Chunk sums up the area with the statement, “one thousand dollar windows, and million dollar houses.” Cymbals quickly corrects him “no, these homes have to be worth at least two mil’.” We finally reach the twisting, wrought iron that guards the entrance to Moosehollow. It certainly does an effective job of symbolically separating the community from the rest of humanity below. Yet it seems to magically open for us as we pull within a few feet and Chunk questions “what the heck is the point of a gated community if the gates open whenever you drive up to them?” It probably has more to do with prestige than neighborhood security (Blakely and Snyder 1997). We drive inside the gate, passing an elaborately carved, wooden sign with a picture of a Moose and “Moosehollow” written underneath. Cymbals posits, “it’s a gated community on top of a community with its own golf course, so they’re like the elite of the elite.” The homes in this

subdivision start around \$1,500,000 and can reach values of \$3,000,000 or higher²². We always work in wealthy communities but The Colony is the only other community that can rival this one.

Chunk parks the buggy just off the side of the freshly paved road near a very long, rectangular log cabin style home with darkly stained wood, simulated white chinking, and a separate cabin housing a three-car garage. We dismount and prepare for work by putting on our chainsaws chaps, helmets, earplugs, and safety glasses and collecting the saws, dolmars, axes, and falling wedges that will be needed for the operation. Tim tells us that we will hold off on a discussion of the project until we reach the worksite, so we assemble in a line and prepare to trek into the woods. We wait for a black BMW to pass before crossing the road and march up the red, stone-lined driveway of a light beige, stucco and stone home. We then make an abrupt right onto a narrow, dirt footpath that leads us down onto a larger trail that runs through the extensive natural area behind the neighborhood homes. The remnants of our first week's work are evident all along the trail. There are 10x10x10, teepee shaped brush piles throughout the woods and stacks of firewood located just off each side of the trail. The brush piles are supposed to be burned at some point during the winter. As for the stacks of firewood, the district forester and the Moosehollow homeowners' association management believe that residents will remove this wood for personal use but I have my own doubts about this assumption.

²² See Appendix B

We reach our first work area and set our gear down as Tim gives us our instructions for the day:

“We are just basically continuing with the shaded fuel break again. Don’t worry too much about the ladder fuels because we took down too much last time and apparently they really like them out here, so we’re not really gonna concentrate on them. Just make sure that you’re only taking out dead stuff, if there’s any question just leave it or come get me. Just take down the dead stuff and limb up the conifers. Remember, that out here, less is probably more. It’s ten percent labor and ninety percent aesthetics.”

There are two primary criteria by which the value of vegetation is judged in the interface: aesthetics and combustibility. It is not clear; however, which one of the two is more important when determining the proper course of action. It is difficult to maintain a proper balance when confronted by these often-divergent criteria. The targeting of dead material is therefore a very easy rationalization because it is considered to be both an eyesore and flammable. No homeowner ever objects to the removal of dead material from the landscape, but complaints abound when too much live vegetation is removed. Live vegetation is pretty and natural. Dead vegetation, however, is neither. Unfortunately, highly shaded fuel breaks are generally “less effective per unit area” at reducing the effects of wildfire. (Agee et al. 2000:64). Too much live vegetation eventually begets dead vegetation as well as the irregular, large-scale fire.

Cymbals, Diego, and I form into a three-man saw team and make our way to the top of a forty-percent slope. We are working only a few hundred feet from the back door of a large, two-story, olive colored, stucco house with a large wooden back porch and numerous, mirrored windows. We find ourselves in unfamiliar territory. There are no large, dead

lodgepole pines to fell or limb up inside our work area. We are completely surrounded by maple saplings. As usual, none of us are quite certain as to what amount of live vegetation should be cut and what amount should be left. Diego is running the saw when he calls down to me “Hey J, what should I do with these up here near the guy’s house, I mean they look nice and all.” I reply, “Ummm, I don’t know, I guess cut some and leave some.” Cymbals adds “and we can’t go any further up or else this guy won’t be able to lie to himself and think that he lives in the woods.” Diego then proceeds to cut about sixty percent of the maple saplings behind the house while Cymbals and I collect and pile them in assembly line fashion.

We have, once again, cut too much. We always cut too much. It is hard to visualize percentages, especially once you are in the thick of things. Tim’s complaints are instructive:

“I love how they give you these off the wall percents. I was talking to the DNR man, Kent and he said keep it between forty and sixty percent removal. So I said okay, so fifty percent. He said no; no let’s keep it between forty and sixty. I don’t know what forty or sixty looks like.”

Contrary to some homeowners’ expectations, we are not a landscaping crew. We do not share the same level of concern for the aesthetics of the operation. As Cymbals exclaims while revving the saw, “I’m takin’ this shit down. It’s on its way out. Fuck these people if they don’t like it.”

Such is our standard mode of operation. Poor communications abound in the world of natural resources. The project instructions are always in a constant state of flux. Management is apt to change their minds about the details of a particular project at least half

a dozen times or more. Tim gives us these changing project instructions as relayed to him through the district forester or the local homeowners' association representative. We then split into saw teams and make a good faith effort at sticking to the most recent instructions for the first couple hours of work. Then, inevitably, things get fuzzy. It becomes harder and harder to remember which set of directions to follow. We put our heads down and get into a rhythm. Boundaries, targeted vegetation, and cutting percentages always increase slightly as the explicit instructions become more like loose guidelines. Cymbals sums up our difficulties nicely: "I hate it when they keep changing the project. Drag all the slash to the road. Make piles. Don't make piles. Spread the slash out. Cut the logs in one-foot sections. No, now cut them into four-foot sections. No, now cut them into one-foot sections again." The exact methods of shaded fuel break construction are equally as nebulous as the concept itself.

Just as we are finishing our work on this portion of the hill, a business casual, white man in his mid forties appears outside on the second story porch of the house near our worksite. He calls down to me as I walk by "hello, how are you?" I reply with a hesitant "alright." The man continues "I see you've been cutting up near the house today." I reply, "Yes we were kind of worried about that, we didn't know how much to take, but we tend to overkill as opposed to leaving too much." The man states "I would have preferred if you had left a few more maples. They are just beautiful in the fall, but what you've done is fine. I am about to respond to the man when I realize that he has turned away from me to make a cell phone call. The conversation has ended without my knowledge. I continue rummaging

through the brush in a half-hearted effort to find a misplaced water bottle. I hear Cymbals start up the saw below me and the revving quickly drowns out the man's phone conversation. I give up my search and head down the hill to meet up with the rest of the team.

It is now twelve o'clock and the whole crew has gathered in a shady spot by the trail to eat lunch. It is around ninety-eight degrees outside and the humidity of the moist bottomland area in which we are working makes for a very nasty day. Cymbals is hanging out his bandanna to dry on a tree branch while Farley and Chunk display a sort of occupational pride through a jocular argument over whose shirt is the sweatiest. Meanwhile, Tim is sitting in the shade, just having dip for lunch because he "never gets hungry in this type of heat anyway."

We have gotten into a discussion about the engines crew that worked with us the last time we were at Moosehollow. Tim says, "I know it's supposed to be really hot all week, but at least we won't have to deal with the engines crew." Cymbals replies "yeah, the engines took all the big timber last time and just gave us the rest of the shit to do, they didn't limb up the pines, and they stacked piles underneath the trees. They really suck at this. TJ quickly counters, "I don't think it's so much a matter of they suck at it as they just don't care." Then Tim explains the matter more frankly:

"The engines just aren't worth shit. I know they're on project work and they don't want to be here, but normally when you're working with another crew, you kind of want to step it up a bit. So if this is what they're doing with us, it makes me wonder what they do on their own. Overall, I think this season has made me lose some respect for what fire crews really do. I mean I know they work a lot but I'm not sure that they really do anything harder than we do."

It is, however, understandable that an established fire crew would not be overly enthusiastic about a brush removal project. There is no possibility of overtime or hazard pay involved, and the crew really has nothing to prove to management. They have already made their way onto the fire lines. Time spent on fuels mitigation projects is equivalent to money taken out of their pockets.

The conversation is now dead as the crew appears to be mulling Tim's comments or lost in their own heat-induced coma. TJ and Dan are sprawled out across the trail and TJ's snores are becoming audible from underneath his hardhat. I rise up from my reclined position as Chunk notes lethargically, "that boy could sleep anywhere." I walk a few feet off to take some pictures of the brush piles and stacks of firewood that are visible from the trail. This rouses Chunk's attention, so he asks, "whatchya doin' there hotshot." I reply, "Just gettin' a few pictures of our work."

The photography is a semi-calculated move that allows me to develop a general question about the utility of the project. I quickly substitute camera for notepad and ask Chunk "so what do you think we're protecting out here?" Chunk responds adamantly "nothing, free fuckin' tree service is what we are, it's not like because we're taking out dead trees that if a fire came roaring through here it's gonna stop it." Kadie adds, "Yeah because we're not really constructing a fire break." Then Tim sarcastically counters "dude, it's a shaded fuel break." Chunk jokes, "Yeah, a very shaded fuel break." This discussion launches Tim into a comical monologue about his future as the brush crew supervisor:

“You guys will go on and do all your great things in fire and you’ll come back and see me. And every season I’ll be more and more haggard and ornery. My hair will be completely white and my skin will just be melting away from my face. We’re making a shaded fuel break; we’re making a shaded fuel break. I don’t even know what that means. What do we really accomplish by just taking out this dead stuff? I can’t even say it with a straight face anymore.”

We all laugh at the vision of a young man aged beyond his years from the puzzling work required by the wildland-urban interface. Tim’s words are comical yet brutally honest. No one really seems to know what we are doing out here. Yet, one thing is fairly certain, it probably will not help to stop a fire.

I am just finishing my chicken scratch notes and placing the notepad back in a sawdust lined pocket when two, middle-aged, blond women come jogging up the trail with a large, freshly groomed, big black poodle leading the way. They stop to chat with us for a while. One of them says, “Hey you guys look like you’ve been working, or maybe not,” seeing that we are on a lunch break. The other one questions, “So what are you guys doing out here, fire hazard reduction?” Tim replies, “Yeah, just taking out some of the dead.” The first lady responds, “Well it’s a nice place to do it, it’s pretty out here isn’t it?” Tim replies, “oh yeah, it really is, and it must be nice to have a place like this to hike everyday.” She responds, “oh well this trail is public, in these new developments they have to put in public access trails.” They thank us for our work and continue on their jog, but the concept of a public access trail within a private, gated community is befuddling. I wonder how many outsiders actually know about the existence of this “public” trail, and more importantly, how they gain access. The public quality of this trail is just as produced as the interface itself.

Lunch is over and it is time to go back to work, but the sight of the district forester ambling down the trail with a GPS unit halts our progression into the woods. He is a large, friendly white man with white hair and a visible beer gut lurking just behind a large belt buckle. He asks Tim “how are things going?” Tim replies, “Pretty well, I just have some questions about these ladder fuels. We had a few complaints about cutting too much the last time we were out here so I was just wondering what to do about them.” The man replies “well, this project is a good start, but if we don’t get some more stuff out of here, they’re still going to be at risk. But, to really answer your question, I don’t know. This is the first time I’ve been on this property; I’m headed over to talk with the homeowners’ association right now.” The community has the first and the last word on the direction of this project.

Diego, Cymbals, and I now find ourselves back in the woods working busily. It is my turn on the saw and I have just finished falling a couple of the large, dead, gray, acrid smelling, and rust-infested lodgepole pine trees that are our primary targets for removal. We are now working to clear out a few areas for slash piles before I begin limbing the lodgepoles. Creating a slash pile suitable for future burning requires removing both live and dead vegetation from the ground and overhead. The creation of these sites actually requires more of our time and results in the removal of more vegetation than the actual falling of the dead lodgepoles the site is designed to hold. Diego notices this stating, “This is barely an improvement.” Cymbals concurs, “Yeah, this is just marginally better. We’re just substituting piles for big logs.” It is true, but we have little alternative. Such are the nature and objectives of shaded fuel break construction.

The rest of the day continues with much of the same. Diego, Cymbals, and I take our respective turns on the saw with each passing tank of gas as we continue to fall dead lodgepoles and open up areas for slash piles. The slopes are steep, the weather is hot, and the work is physically demanding but the day is not altogether unpleasant. I have managed to become more acclimated to the job and my coworkers throughout the course of the season.

The workday ends around three o'clock in order to give us time to hike out of the woods, drive back to Red Mountain Conservation Center, and rehab the equipment. We march up the hill and back onto the trail to head out of the woods. We pass a white couple in their mid forties as we make our way along the trail. They stop to say "thank you for the job you are doing, we really need it." We pause to speak to them briefly and continue.

The residents we have met out here continue to thank us for our work. It was nice at first but now it is almost becoming condescending, despite their intentions. We do not feel a sense of accomplishment worthy of gratitude. The difference between our conceptualizations of the work and the landowners has become a source of tension. The crew does not believe that taking down a few dead trees is really going to reduce this community's fire susceptibility, but they seem to. Or they express gratitude for some alternate reason. For others, a simple thank you has become an empty gesture in the midst of such wealth. It serves to distinguish workers from residents. As Cymbals explains "thank you for the work you're doing! Oh fuck you. If you want to thank me, why don't you have your butler bring down some lemonade at lunch?"

We emerge from the woods and onto the road rather suddenly, just in time to meet some of the residents returning home early from work or play. We are a sight to see with our 24-inch, Stihl chainsaws and red dolmars. We are covered in sawdust, pine sap, chainsaw exhaust, bar oil, dirt, and various leaves walking in a single file line down the wrong side of the road. The residents driving by in their luxury sedans are staring at us with the curiosity that such a scene probably deserves. Cymbals says “we certainly are a motley crew.”

I am admiring the two-story, beige, stucco and stonework house we are passing on our left when Cymbals says to TJ, “look at that house, all the houses out here are big. You’d have to have like five to seven people living in there just to fill it up. Why would anyone need a house that big?” TJ questions, “You wouldn’t want a big house?” Cymbals responds “fuck no; you’d have to pay a fortune to heat and cool it.” TJ counters “but if you can afford a house that big you’re probably not worried about heating and cooling it.” Then Cymbals explains “yeah, but it’s not right. I’d just have a two or three bedroom house at most, so company could come over. And my house would be straight concrete and steel. None of that fruity stone and fake log cabin shit.” Unfortunately for Cymbals, a small, concrete and steel home would stick out like a turd in a punch bowl in this neighborhood of wilderness charm and amenity. The discussion fades as we reach the buggy. We store our equipment in the side compartments and climb aboard for the slow, bumpy ride through the community gates and back to Red Mountain Conservation Center.

Moosehollow is a great representation of the racial and class segregation that pervades the wildland-urban interface. I cannot recall a single instance where I encountered

any interface landowners who were not white. It just did not happen, and toward the end of the season, I began to take it for granted that it would not happen. As Chunk said, on our first drive through The Jeremy Ranch to Moosehollow, “awful lot a honkies in here.” It was an exceptionally perceptive statement considering that Chunk is white. But, not all of our crew shared this particular racial classification and I am sure that for these members, racial discrepancies were an additional source of anxiety in a setting that already exuded class inequalities. The socioeconomic differences between the crew and the interface landowners further contributed to the tension between aesthetics and functionality in our work. We distrusted the landowners because we could not readily relate to them.

Moosehollow and the whole interface phenomenon are a continuation of white flight from racially and economically mixed cities of hustle, bustle, and perceived higher crime rates to more subdued, bucolic settings of sameness and supposed safety. It is socioeconomic segregation. The production of the interface landscape maintains this segregation both materially and symbolically.

Sourdough

“I told him [campground member] we’re doing fire prevention work.” He asked me how I liked the work... I said I didn’t. This work sucks. I didn’t want to tell him that this project was bullshit though, Tim probably wouldn’t have thought too highly of that.” – Dan

It is the last project of the season, which for most of us, means that we have four more days left in our brush crew careers. Once again, we find ourselves on a slow, rambling ascent in a northwesterly direction along I-80. We will be passing Park City soon. We always come this way. It would not feel like a real project if we were going in any other

direction. I am in an introspective mood. I feel as though I have learned much from my three and a half months of brush crew experience. I am not sure what will come of my studies in the wildland-urban interface and I am not sure that I really care, but I am positive that my time out here has been meaningful. I now have a story to tell and I know of at least a handful of people who will want to listen. Whatever else happens is inconsequential.

It is a little after eight in the morning. Everyone else seemed to be sharing in my somber, reflective mood earlier, but now things are starting to liven up inside the buggy. Kadie has plugged in his IPOD and now we are all listening to “Little Blue Dune Buggy” by The Presidents of the United States of America through an old home stereo speaker. Farley is standing in an awkward position over his seat as he attempts to duct-tape over the holes in the crotch and left leg of his brush pants. They only gave us one pair each for the whole season, and everyone’s are a conglomeration of rags and patches at this point. The Sup truck is hauling the big, yellow Vermeer chipper ahead of us. Yet again, it is experiencing mechanical difficulties as we slowly make our way up the steep grade. As we pull into the far right lane and turn on our hazard lights Chunk exclaims, “We’re at seven miles an hour, seven miles an hour.” Just then, a “check engine” light begins flashing over the buggy’s speedometer. This, like everything else, has happened before. We should be okay unless we start hearing a loud buzzing alarm.

We have already passed by Park City and are now coming up on an area of large, stucco homes and log cabins that continue to increase in size and value as they grow far up the mountainside. Kadie looks out the window and says, “Look at those houses.” Cymbals

replies “That’s Deer Valley man, there’s not a fuckin’ house in there that isn’t worth less than two million dollars.” Kadie questions “Don’t they have their own ski slope in there?” Cymbals answers “Yeah, it’s on the other side,” and Kadie wonders aloud “But how do they get to it?” Cymbals quickly retorts, “I don’t know, maybe a fuckin’ golden carriage comes and fuckin’ picks them up.”

The buggy begins to quiet down again as most of the crew tries to sleep a little before we reach the project site. I decide to stay awake this morning to take in the whole scene one last time. I have seen it all before but something about this morning has put it in better perspective. The altitudinal socioeconomic gradient is written all over these winter ski slopes. Medina knew it all too well. He remarked on it at our first project in The Colony. It was a simple but profound perception: “the rich go higher,” and it seems applicable to conditions ranging far outside the mere spectrum of the wildland-urban interface.

We pull off a narrow, two lane road forged between two rocky canyons and rumble onto the bumpy, dirt and gravel road that cuts all the way up through Sourdough campground. It is not the most affluent area we have visited on our tour of the interface, but it is still a private, recreation facility only open to those who can afford its monthly dues.

The sup truck stops outside a big, red, swinging metal gate while Tim gets out with the key. Beside the gate I can see a wooden sign with a picture of a mustached man holding a banner that reads “Sourdough.” Underneath the banner are inscribed the words “Non Owners Must Be Accompanied.” We are, yet again, crossing the threshold of a well-defined boundary.

We pull up just inside the gate and park the Sup truck and buggy on the side of the road. Our objective for this project will be to remove five to fifteen foot wide sections of brush demarcated by pink flagging along the sides of the road. This does not seem like it classifies as true fuels mitigation. I am not sure what it is, possibly traffic visibility improvement. Kadie questions Tim about this very matter as he is preparing to leave with the district forester to pick up a small dump truck, "So what's the point of this project?" Tim replies "I think eventually they're going to extend this into a fuel break and use the road as a 'natural' part of the break." Kadie jokes "So right now we're just landscaping? The sign on the buggy does say Red Mountain Landscaping Service you know." Tim confesses, in a somewhat exasperated manner, "Yeah, it's landscaping." Tim leaves and we break off into saw teams to remove the bramble on each side of the road. There are only three, semi-functioning saws left at this point in the season, so the saw teams are a little lopsided.

I am swamping for Cymbals on the left side of the road. He fells small, maple and gambel oak saplings with a swift flick of the saw as I follow closely behind to gather and fling the fallen debris back toward a pile near the road. The rest of the crew is on the other side, struggling on a short, steep hill below the side of the road. They are going about it in assembly line fashion but they are still falling left and right because the dirt is loose and rocky and the incline is about sixty percent. I can hear Chunk yell, "fuck my beard" over the intermittent revs of the chainsaws as he slips and falls to the ground in a heap of dust. I pause for a moment to laugh at Chunk and notice that a middle-aged, white man has entered the camp gates and is now pulling up beside us in his new, red Dodge pickup truck. He stops

to talk to Kadie who is standing at the top of the hill on the other side of the road. I walk over to inspect the situation but the truck pulls away before I can get there. Kadie sees me and says, "He asked what we are doing. I told him we are doing fire prevention work. Yeah, I just stayed as vague as possible like Troy said to; I told him it's part of the National Fire Plan. He said, oh what does that do? I told him, it helps prevent fire." I do not know exactly why Troy would have told Kadie to give landowners vague answers. However, it could have something to do with Troy's disinterest in answering questions posed by a general public he perceives as being uninformed on fire management issues. After a couple questioned him on the conditions of the current fire season in Fruitland he explained, "I hate when people ask me stupid questions, how am I supposed to know what the fire season is going to be like? It all depends on the weather." Fire management knowledge is often proprietary, only disseminated on a need-to-know basis.

Work continues in much the same way throughout the course of the day. Tim eventually returns with a battered, old, white pickup truck that has been modified with a dump bed in the back. One group is sent off with the buggy and the saws to cut along the roads while the rest of the crew stays behind to chip and collect the debris in the small dump truck. Work is slow. The dump truck is the limiting factor in the equation. The small bed fills up with chips quickly and then we are all forced to wait as one member of the crew drives the truck to a remote location to dump the chips. It is not a good use of our labor but no one seems to mind the leisurely atmosphere.

Dan and Tim are sitting on the side of the road drinking from their isopropyl alcohol style water bottles during one of our truck-induced breaks. Dan becomes the second member of the crew to openly question Tim about our objectives in Sourdough. During the discussion, Dan states, “at least the other projects had a point.” This launches Tim into a diatribe on the usefulness of our work:

“None of what we’ve done has had any point, except maybe for Fruitland and you weren’t really even there; you were there the second week. We’ve just been cutting down dead trees, which really isn’t going to make much of a difference because there’s still a lot of fuel on the ground.” Dan replies, “So this is just all aesthetics?” Tim retorts “yeah, I guess, but I really don’t see how this is an [aesthetic] improvement. I mean it’s not really a visibility issue. I mean I guess it could be, I don’t know. It was obvious that the DNR [Division of Natural Resources forester] guy really didn’t have anything for us to do. I kept asking questions and he really wouldn’t give me any answers. I kept trying to explain to him how this project wasn’t going to utilize our manpower. I was just trying to get some work done for him but he just got really defensive as I kept asking questions. So anyway, we’re staying here all week so we’ll just cut back off the road. There’s not very much work, so we’ll just do it at a really leisurely pace.”

At the end of this rant, Chunk replies sarcastically “we’ve got one more pink section and three days to do it, so we better hurry.” It is going to be a slow, unfulfilling final week of work.

The dump truck comes sputtering back down the hill and we all stand up to return to work. As the dump truck approaches, a middle-aged white man comes driving up in a newer model Ford pickup. He is a big man with a large gut, blue, plaid shirt, gray suspenders, white beard, red face, and three hundred dollar sunglasses. It is apparent that he is some sort of campground attendant and that he has something else he would like us to do. He asks Tim “are you guys looking for something to do?” Tim replies, “No, not really, we’re gettin’

ready to head back to work right now.” The man replies, “well if you do have time, we’ve thought of something else we’d like done. If you could just cut down all these dead trees here along the road for about a quarter mile,” and he points to a stand of dead aspens off the left side of the road. He continues, “Don’t worry about cutting them up, if you could just fall them downhill that would be great. It’d save me from having to do it. They’re just such an *eyesore*, you know?” Tim happily responds “we’ll do it; shoot yeah we’ll do it, that’ll be no problem.” Then Chunk expresses to the rest of the crew “just falling trees, heck that’s a treat compared to what we’ve been doing.” Falling trees is the best part about this job. Don Keydick said it best: “I love cutting, you know, if I couldn’t cut trees down, I wouldn’t do this job.” Tree falling goes back to the masculinity of the profession and our objective of dominating nature. A couple of us are dispatched to remove the “eyesores” while the rest of us continue with our original operation. It is now even clearer that we are truly just conducting aesthetic enhancements. Still, we forge on in our glorified landscaping for the remainder of the day.

We are all back at the campsite, smoking Swisher Sweets cigarillos and playing horseshoes after having returned from watching the moose that congregate in the late afternoon around the man-made lake near our campsite. We have collectively decided to only work ten-hour days because of the slowness of this project, and we have much more free time on our hands as a result. Diego and I are both on a hot streak at the horseshoe pit. We are matching each other’s “ringers” throw for throw and puffing away happily on our tiny, sweet cigars. I exclaim loudly in a smoke hardened voice, “I’ve never been in the

presence of such world class athletes before! It's kind of intimidating." Cymbals questions, "J, how often have you played this game?" I reply, "Not much, this is clearly a fluke." We continue playing horseshoes and smoking cigarillos until it becomes too dark to see. Then we retire to the campsite to sit around the fire and muse about the money to be made when the majority of the crew is bumped up to fire duty.

Our project in Sourdough highlights the lack of communication that plagues fire management. Troy, the fuels program coordinator, did not want to be bothered by questions from the general public. Similarly, the district forester did not want to be bothered by questions from someone of a lower position like Tim. Unfortunately, poor communication presents a significant problem in a field where education is the biggest impediment to proper fuels reduction and structure protection (Utah wildland-urban interface fuels coordinator, pers. comm., 7/21/08). It prevents understanding on the part of both landowners and crewmembers.

Conclusion

It is the last night at Sourdough and I am lying in my sleeping bag. I am finished taking down my field notes, there is not much left to document at this point. Bruce Springsteen's "Bobby Jean" is playing on the truck radio right outside my tent. It pulls me into a reflective mood once again, and I find myself thinking about how I will write this story. I have met people from all over the country out here and together we have battled shoddy equipment, difficult environmental conditions, and relatively low wages with only

the promise of more of the same to come, if and when we make it to fire. The question of the hour is how do I portray these experiences in the manner they deserve?

I venture back to a rocky, desert hill in Fruitland where Chunk asked me about my thesis: “So what are you gonna write about? How people hate slopes, sagebrush, and fires, but they like trees.” At that time I said, “It will be about the interaction between people and nature,” because I really had no idea what the thesis would be about, and this was a good, generic answer. I realize now that it was a generic answer, but not a good one. I have discovered that the story of the wildland-urban interface is much less about the interactions between people and nature and much more about the interactions between certain groups of people and their characteristic conceptualizations of nature. If Chunk were to ask me this question again, I would tell him that socioeconomics and politics would be the cornerstones of this piece. It is the story of a privatized, often-feminized nature, its owners, and the young men and few women hired to clean it up. I scribble this line down in my field notes and turn off my headlamp as I prepare for bed. One day left. As Tim says “It’s the end of an era.”

It is now our last day in Sourdough and we have just finished up our last section of pink flagging, clearing the sides of the roads of dead aspen trees and other, miscellaneous brush. The dump truck has been sent down the hill to dump its last load of chips and the rest of the crew is packing the equipment into the buggy and Sup truck. We climb into the buggy, take off our hardhats and remove our earplugs and safety glasses. Chunk starts up the engine and we follow the Sup truck down the dusty, mountain road to meet up with Dan and Diego in the old dump truck. Cymbals is sitting in the “command chair” in the rear portion

of the buggy in his typical feet-on-the-wall pose. He is staring out the window at the sides of the roads on which we were just working. In an uncharacteristically nonchalant manner, Cymbals makes his most poignant observation of the season: “The crazy shit is I can’t tell what we’ve done, it’s marginal at best. Except for the wood chips or occasional visible stump, there’s really nothing to show that we were ever even here.” My season of experience working in the wildland-urban interface leads me to wonder if this was not the point all along.

In the final chapter, I will finish my discussion of the wildland-urban interface by further analyzing central research themes and making recommendations for future research and improvement of fire management in the interface. I will describe the productive value of landscape and labor genderization, socioeconomic stratification, boundary formation, and the continuing tension between aesthetics and functionality to show how all these issues play significant roles in the material and symbolic maintenance of the wildland-urban interface.

Chapter 4

“No Trespassing”: The Cultural Tools used to produce a Bounded Landscape

Introduction

“What’d they take you off the saw after you got a little too carried away?” “Hey, fire has no property boundaries.” “Yeah, but money does.” – Kadie and I

The crew is spending the week on a project in a rustic, gated community known as Forest Glenn. It is the middle of our third day and we are all working busily, felling blaze orange marked, live lodgepole pine and engelmann spruce trees off the side of a dirt trail running through the community. I look up after swamping a pile of pine branches and notice a large middle-aged white man with neatly trimmed black hair eyeing our work from the trail above us. He is determinedly making his way down to the work area, approaching Tim and Kadie a few feet away. The man’s aggravation is evident in his questions to Tim: “Are you guys gonna cut down any dead or just green? Are you guys going to clean up this stuff here? I’ve been waiting three years for someone to come out and clean up the mess from the last operation.” Tim tries to placate the man from behind his comical white, cowboy hardhat and aviator sunglasses saying:

“Well right now we’re just cutting the trees that were previously marked. We don’t make the decisions about what gets cut, but I can get you in contact with the people who do. As for the slash²³, we have gone back and forth on this all week. Apparently there are some concerns about the water line in this area. They haven’t wanted us to drive a vehicle back here.”

²³ Woody material considered waste

The man emits an audible grunt to express his frustration with the project and then retreats back up the hill. He is not happy, but there is little we can do for him now. We are just following the instructions of the homeowner's board and the district forester. Cymbals comments, "Everybody wants to fuckin' bitch when you're trying to protect their house...fuckin' douche bags." The man is now out of sight but not out of mind.

The Gendered Workplace

"We are just basically raping the land when it comes to the dead stuff." – Engine Crew Squad Boss

The periodic contentiousness between brush crewmembers and the interface homeowners for which we worked was not readily apparent to the casual observer. It generally manifested itself in the form of body language, nearly inaudible grunts and moans, changes in work production or project guidelines, and profane dialogue between crewmembers. It was a conflict formed on the ideological and material grounds inherent in the two parties: social backgrounds, knowledge and ideas regarding fuels reduction work, and conceptualizations of nature and its appropriate uses and values.

The members of our crew were of various races, but we all came from working class backgrounds. Our clients, however, were overwhelmingly upper-middle to upper class white individuals who lived or vacationed in gated communities. It was only during the course of work related functions that we ever mixed. Even in this context, our relationships were tenuous – limited to short niceties or instructive communications. There was always a sense

of social tension that arose from these small interactions because our dominant conceptions of each other had largely been formed on the basis of random observations and hearsay.

As a result, entering these gated communities was equivalent to crossing the boundary between two well-defined social orders, one of which we knew little about. As Cymbals commented upon entering the marked “no trespassing” gate at Forest Glenn, “man that’s a pretty intimidating gate.” Likewise, the site of middle-aged white people taking mid-morning nature walks and playing afternoon rounds of golf while we labored in their immense backyards made us all very aware of our positions within the social hierarchy of Moosehollow. We were temporary aberrations in a privatized landscape. Cymbal’s reaction to one of these instances was particularly striking: “What the fuck is this, a fuckin’ retirement community for rich fucks? I really hate rich people. “Bougis”²⁴ ass motherfuckers. Fuck these douche bags. Fuckin’ rich old ladies. Have a heart attack and die.” The vision of immense wealth expressed in locations such as The Colony or Moosehollow inspired a complex mixture of emotions in the crew that ranged from jealousy, to inferiority, to intimidation, to a haughty disdain for the whole community and the people therein.

The stratified interface setting and fickle nature of project guidelines consistently reinforced the distinction between laborers and homeowners as well as each group’s characterization of the work we performed. The brush crew was hired through a complex bureaucratic process with the stated goal of fuels reduction but the true function of our work was really always at the discretion of the interface homeowners footing the balance of our

²⁴ Cymbals abbreviation for bourgeois

government subsidized contract. This much became increasingly obvious as we undertook projects in one gated, interface community after another. Plans were consistently scaled back to fit the aesthetic ideals of our interface clients. We spent the majority of our time cutting down large, dead lodgepole pines or chipping old, tangled brush piles that had become blemishes on the aesthetic landscape. Rarely did we significantly address the still abundant, ladder and ground fuels that were more likely to become the source of ignition (Agee and Skinner 2005).

The crew, however, was not without fault in the collective failure to fully address these fire hazards. We played right into the hands of aesthetic enhancement in places such as Moosehollow, The Colony, and The Manor Lands. Both the homeowners' and the crew's cultural valuations of nature were predisposed to the removal of large trees over ground and ladder fuels. The crew outwardly evaluated vegetation on the basis of potential flammability, but when given the opportunity, selected to remove vegetation on the basis of task desirability. Felling big trees played to the trope of masculinity so prevalent in our work and it represented one of the few highlights in a monotonous job. Trees were always more fun and more challenging to work with than shrubs or saplings. As Tim noted, "there's no glory in cuttin' the small stuff." Similarly, aesthetic evaluation led interface homeowners to prefer the removal of big, dead eyesores. The ladder fuels, being generally alive and pretty, were therefore rarely cut to the extent necessary to really reduce fire risk. The ugly, dead lodgepole pines, however, were always the first imperfections to be removed. The cooptation of stated management goals was thus a communal effort.

Not recognizing the full extent of our partnership in the reproduction of the interface, it seemed as though homeowner's had unrealistic conceptions of fuels reduction or that they were simply seeking cheap aesthetic enhancement. It was easy to believe that we were "a free fuckin' tree service" or "glorified landscapers" under such circumstances, as if we had absolutely no choice in the matter. The crew knew that stated management goals never matched what we implemented on the ground and we began to view homeowners as the sole reason for this discrepancy in our work. This facilitated a certain demonization of the interface homeowners. In reality, the homeowners were only one cog in a dysfunctional machine that also included institutional fire management and its workforce. Fire management in the interface was like a cruel game of telephone, where the objectives and methods changed at every level of communication. Many homeowners probably believed they were doing their part to mitigate fire hazards in the interface, but we perceived them as pampered elites who were discounting our social roles by milking the system for government-subsidized, aesthetic enhancement. We understood nature through work and believed that interface residents only knew nature through leisure (White 1995).

On a scale ranging from "totally ineffective" to "very effective," sixty percent of the brush and fire crewmembers I surveyed at the end of the season thought that our mechanical fuels reduction work had been only "marginally effective" at reducing the threat of wildfire in the interface. This cross section included the brush crew supervisor. Another thirty percent of crewmembers rated our work as "somewhat effective," while just ten percent believed that our methods had been generally "effective." Of course our work was probably

more effective than these statistics represent, but there is no doubt that aesthetic issues were a larger motivating factor than either management or landowners were ever willing to admit. Therefore, the contradictions between aesthetics and functionality were a legitimate source of crewmember disdain throughout the season. Kadie explained the situation perfectly when I asked him about our chipping project in Wolf Mountain: “What do I think of this job? This is bullshit. It’s bullshit man. It’s pointless. Come cut down some dead stuff and shit I don’t want. Come thin the shrubs on the roadside. That shit’s not gonna burn. I’m not a fuckin’ lawn service!”

Furthermore, the crew was never entirely convinced that homes, especially vacation homes, were an appropriate use for land that had remained largely undeveloped for many years. TJ and Cymbal’s discussion of the matter is illustrative:

“Why would anybody want to live out here? I wouldn’t, you’re out in the middle of nowhere and it’s not like you’re even alone. There are still just as many people around you as in other places.” “They don’t live here; these are summer or winter homes or whatever. They’re rich; they just come out here when they’re bored.”

We questioned the equitability of dedicating taxpayer money to the protection of homes and homeowners who could probably afford it on their own. Kadie and Cymbal’s discussion in Fruitland sums up the crew’s thoughts on the matter:

“You know how much the State has spent on this fuckin’ fireline?” “I know it’s like \$1000 for each of us, fuckin’ idiots, protecting some homes all because it burned last year. I can’t believe the State subsidizes stupidity...well yes I can. Like all these people who can’t take care of their yards and that work at Wolf Mountain, it was mostly cosmetic.” “Yeah, aesthetics, and it’s ridiculous that the State should pay for it.”

Moreover, some of us did not really believe in cutting down dead trees simply to remove fuel and reduce the threat to interface communities. There were definite contradictions between our work-related goals and personal dispositions. Tim explained in a survey response, “I can’t reconcile my philosophical viewpoint on nature with what I do. I’m an advocate of dense, urban living. Houses shouldn’t be built in the middle of f-ing nowhere. But, I like chainsaws and fresh air, so I just suppress my qualms as much as possible.”

These ideological differences coupled with a contempt or jealousy of wealth were often vocalized at the beginning of the season but became more internalized as we were indoctrinated with fire management procedure, institutional rationalization, machismo, and job skill proficiency. Yet, it was always there, somewhere beneath the surface, often in a troubled facial expression, but most likely in a profane joke.

Thus, gendered irreverence became the crew’s primary defense mechanism against discrepancies in the stated and actual outcomes of our work as well as our unease in the interface setting. It was a productive source of social solidarity in a foreign landscape (Haenn 1999). Our feelings of anomie were combated with lewd declarations of our own machismo or equally lewd feminizations of the upper class interface residents. We used irreverence to express pride in our abilities to perform culturally defined “men’s work.” Working hard with craftsmen-like proficiency seemed to be the trait that we came to value most in others and ourselves. Accordingly, the perceived vision of idle interface residents inspired contempt, especially for the male residents. In our minds, wealth and political connection were the only qualities that allowed these men to live where they did. They could

not or would not perform the tasks required of true men, therefore, they could not really hack it in this environment without help. The hiring of the brush crew was sufficient evidence of this fact. As Cymbals commented when we were told to cut pine logs into more manageable one-foot sections, “You wanna live out here and think that you’re a real mountain man, come cut your own fuckin’ firewood.” Our irreverence, however, was not always intended to feminize the male homeowners; it was often simply used to reinforce our own feelings of masculinity.

Feats of strength, discussions of money, cars, politics, or descriptions of sexual conquests and innuendo often took center stage in these instances. Tim reaffirmed his manly desires when he saw a group of three, middle-aged white women jogging along a trail near our worksite and contemplated, “I wonder if I should call Kent and tell him that there’s been a cougar sighting.” “I like to hunt cougar.” Similarly, Cymbals proclaimed a sense of pride and power in work when he announced, “Man, I could feel the fuckin’ vibrations when that gorilla dick hit the ground,” after we had successfully fallen a tremendous lodepole pine tree. The form of our irreverence was a manifestation of its productive function. It solidified us as a group with a common enemy – interface residents and their nature. Irreverence provided us with some sense of reassurance in a socially and physically segregated landscape in which we were never completely comfortable. It helped us to transgress boundaries.

The Transition between Boundaries

“Ideas about separating, purifying, demarcating, and punishing transgressions have as their main function to impose system on an inherently untidy experience” (Douglas 1966:4).

It is my last day in Salt Lake City and I find myself running in a vaguely southern direction away from downtown. I have just completed an uneven transaction at the local “Pick-N-Pull” salvage yard, selling the rusty, white 1996 Chevrolet Berretta I bought from a Nebraska farmer to finish my trip to Utah. I have a flight to catch tomorrow and they were willing to pay me a few dollars for the rig, so I ambivalently packed my license plate and registration in a bag and strapped it over my shoulders for the five-mile trek back to my apartment. As I run down State Street with its various pawnshops, tattoo parlors, old motels, and used car lots onto the relative affluence and gradual ascent of 45th Street and its office buildings and chain grocery stores, I begin to think back on my time in the wildland-urban interface of northwestern Utah and the pervading theme of culturally constructed boundaries.

The wildland-urban interface is certainly an ambiguous feature in an American landscape accustomed to a stark distinction between nature and culture. It has no useful category for classification under such a framework. The interface is neither nature nor culture. It is an inconvenient combination that reminds us of the fallacy of the whole distinction. The codified definition of the interface as “the line, area, or zone where structures and other human development meet or intermingle with undeveloped wildland or vegetative fuels” (Final Report of the Federal Wildland Fire Management Policy and Program Review 1995:21) does little to explicate the matter. It merely serves to emphasize

the liminality of a concept constrained by binary oppositions. As such, the wildland-urban interface is wrought with the dangers of boundary transgression. The interface is consistently threatened by the environmental disturbances, like fire, that are inherent in a less developed landscape as well as the transgressions of an expanding urbanity and the lower classes that it was designed to avoid. Conversely, its continued existence and expansion violates the reductive division between nature and culture. The wildland-urban interface, therefore, requires endless assistance to maintain its position atop a social and physical landscape in which it is the true “matter out of place” (Douglas 1966).

Assistance in the reproduction of this social structure is received in many forms, not the least of which is the aid garnered from the powerful political and economic forces entrenched in a system of capital accumulation. Development unbounded and largely unplanned has been, and continues to be, in the short-term interest of capitalist advancement. Yet, the accumulation and maintenance of capital requires investment protection, especially within the liminal interface zone. The institutionalized knowledge of wildland fire and its chief tenet, fire suppression, serves this very function. Fire suppression allows interface communities to maintain their positions within a hazardous landscape much like beach reclamation maintains affluent coastal communities in a never-ending battle with nature. Meanwhile, mechanical fuels reduction provides interface homeowners with the peace of mind necessary to believe that their properties are thoroughly protected from the universality of fire in the landscape. Through the institutionalized knowledge of forestry and wildland fire, mechanical fuels reduction has become the newest bedfellow of fire suppression in the

maintenance of economic interests. Suppression protects interface investments while providing substantial incomes for the firefighting workforce and the various industries attached to its effort. Despite the inadequacies of this management technique, the vested interests in fire suppression and fuels reduction are far-reaching and seemingly immovable, especially with the continued cultural expansion into what is known as the wildland-urban interface. As the Red Mountain Fuels Program Manager once noted:

“I guess that’s the good part about this job, there’s always stuff to do. It’s job security man. You can make a career out of this. As long as there’s this wildland-urban interface thing, we’ll always have work to do in these neighborhoods. The woods keep growin,’ there’s always gonna be stuff to cut down.”

Yet, the difficulty extends far beyond our antagonistic relationship to nature; it is inherent in our relationships with each other. The precarious position of the wildland-urban interface within the landscape is further compounded by the conflicting values and norms of the various social classes that meet at this apparent transition between nature and culture. The silent conflict between social classes was readily apparent throughout my time as a member of an interface fuels reduction crew. More than anything else, the wildland-urban interface represents the ability of the culturally powerful to; knowingly or unknowingly, define, produce, and consume nature according to their particular values. Interface development appeals to a certain illogical preservationist nature ethic. It is the myth of the pristine wilderness packaged and sold to the highest bidders in the form of recreation and vacation properties deep in the woods, but not too far from the luxuries of modern life. The continued development of the interface, however, sows the seeds of its own destruction as

Marx so perceptively noted – the loss of the “natural” basis for which it was consumed. Still, the protection of the grand-scale oxymoron called the wildland-urban interface was the stated reason for my presence therein, working with the rest of the crew as a short-term intermediary between nature and culture.

Recommendations for the Future of Interface Fire Management and Research

“It is one of the peculiarities of the warfare between reform and the status quo that it is thoughtlessly governed by a double standard. Whenever a reform measure is proposed it is often defeated when its opponents triumphantly discover a flaw in it” (Hardin 1968:1247)

The wildland-urban interface is the convenient construction of a culture growing apart from its land and its people. The development of gated, aesthetic communities in northwestern Utah is symptomatic of the increasing distance between rich and poor all across the nation (Low 1997). It represents the inequities arising from a flawed system of ideology that overvalues the production of capital through the consumption of nature. The fictional boundaries of nature, culture, class, and institutional knowledge are therefore necessary to protect the position of the interface within a hierarchical landscape. Yet, these boundaries must be broken and society must become more equitable in order for the conditions of fire management to improve in these communities.

Fire must be seen as the bridge between nature and culture. It should remind us that even humans are members of the natural order. Fire can no longer be considered something out of place in the landscape. In order to reduce growing fire suppression expenditures and facilitate a more effective means of fire management, we must prepare ourselves for a long-term investment in our environment. Mechanical fuels reduction can help to some extent, but

it requires a commitment to proper implementation and multiple site returns in order to have any significant effect (Utah wildland-urban interface fuels coordinator, pers.comm., 7/21/08). The value of fuels reduction can no longer be compromised by the contradictions between aesthetics and functionality.

Still, mechanical fuels reduction alone is not the real answer to fire management woes caused by more than a century of fire suppression (Donovan and Brown 2007). Fire is the answer. This type of management strategy, however, will only be functional under a system of thoughtful zoning requirements that inspire more appropriate orientations to landscape planning. Mechanical fuels reductions must become a tool to facilitate fire use as opposed to fire suppression. Prescribed and “wild” fires should be allowed to burn with regularity even if some homes might be initially sacrificed to allow this course of action. Taxpayers should not be responsible for funding the residential protection of individuals who absolutely choose to construct dwellings in areas of disproportionate risk. Interface homeowners should bear the responsibility for planning, protecting, and insuring their investments. Privilege is already subsidized enough.

In order to affect this sort of change it will be necessary to undertake the detailed study of interface homeowners lacking in this work, as well as a more thorough investigation of the appropriation of scientific knowledge that continues to dictate institutional fire management procedure. More importantly, this change in direction will require a dedication to action, not just continued discussion and development of platitudinous mantras.

“Wildland” fire and the wildland-urban interface are the problems of a socially produced

nature (Braun 2002). The solution to these problems will require a real change in institutional ideology and a surrender of much of the capital contained within to dethrone a status quo over a century in the making.

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Appendices

Appendix A

Wage and Expense Summary for Project Interface Communities

Location	Days Worked	Hours	General Crew Wage	Number of Crewmembers	Crew Total
Fruitland	12	120	11.35	8	10896.00
The Manor Lands	10	100	11.35	8	9080.00
Moosehollow	8	80	11.35	8	7264.00
Wolf Mountain	4	40	11.35	8	3632.00
Argyle Canyon	8	89	11.92	8	8487.04
Forest Glenn	8	80	11.92	8	7628.80
Sourdough	4	40	11.92	8	3814.40

Location	Days Worked	Hours	Crew Supervisor Wage	Crew Supervisor.	Supervisor Total
Fruitland	12	120	14.10	1	1692
The Manor Lands	10	100	14.10	1	1410
Moosehollow	8	80	14.10	1	1128
Wolf Mountain	4	40	14.10	1	564
Argyle Canyon	8	89	14.81	1	1318.09
Forest Glenn	8	80	14.81	1	1184.8
Sourdough	4	40	14.81	1	592.4

Location	Days Worked	Hours	Rate Charged per Hour for Project	Total\$/Job
Fruitland	12	120	23	24840
The Manor Lands	10	100	23	20700
Moosehollow	8	80	23	16560
Wolf Mountain	4	40	23	8280
Argyle Canyon	8	89	24.15	19344.15
Forest Glenn	8	80	24.15	17388
Sourdough	4	40	24.15	8694

Volunteer Time Value/Hour for Labor Share Purposes
19.51

Appendix B

Real Estate and Land Values for Project Interface Communities

Community	Real Estate Values	Average Land Values
The Colony	\$1,395,000 – \$3,895,000	n/a
Fruitland	\$154,900	\$2832/acre
The Manor Lands	\$145,000 - \$325,000	n/a
Moosehollow	\$1,600,000 - \$2,700,000	n/a
Wolf Mountain	\$300,000 - \$2,000,000	n/a
Argyle Canyon	\$169,000	\$1225/acre
Forest Glenn	\$499,000	n/a
Sourdough	n/a	n/a

Sources of Information:

The Colony

<http://www.thecolonywpc.com/availableprop.html>

Fruitland

<http://www.westernland.us/rec.htm>, <http://www.utground.com/>

The Manor Lands

<http://www.nsreonline.com/Listings/listings.html>

Moosehollow

<http://www.searchparkcity.net/valnicholson/cgi-bin/aa.fcgi?aacmd=results&id=gB2uZf&r=1&f=0&t=0>

Wolf Mountain

<http://www.wolfcreekutah.com/>

Argyle Canyon

<http://www.westernland.us/rec.htm>, http://www.homes.com/Real_Estate/UT/City/DUCHESNE

Forest Glenn

http://www.utahhomes.com/real_estate/Utah/Salt_Lake/Brighton.htm

Sourdough

<http://swr8.tripod.com/>