

Fire Control Strategies at Fir Mountain

Background

Although fire management, and fire control can be life-long career opportunities within the State and Federal land management agencies, and are the subject of much academic research and practice, I intend to keep this paper as short as is reasonably possible. I believe that everyone reading this work will be able to intuitively understand the objectives and techniques employed. Everyone who watches television during the summer has seen footage of dramatic and often scary scenes of wildfire rampaging about the countryside.

I just don't have the time or patience to discuss some of the underlying fundamentals of why fire has become such a predictable part of summertime primetime news fare. In my career, I have become intimately familiar with fire in the forest, and to me, it is most definitely a phenomenon that is normal, and with careful planning, somewhat manageable. To that end, I have, from Day One of my ownership of the property incorporated planning for wild fire control into every decision I made, both in the woods, and as I remodeled the Sidney Mansion.

As far as construction went, we had a non-flammable roof made of steel, we cut and controlled all brush and flammable material to varying distances around the structures, and we treated the wood exteriors of the buildings with a fire-resistant chemical. I also installed a 14,000-gallon cistern and water delivery system (hydrants compatible with the local fire department) around the Sidney site, as well as down the driveway all the way to the front gate.

This system remains in place, even though the larger house has been removed. These methods to me are elementary, simple, and straightforward, but you would be amazed at how typically they are forgotten by people who live in what we refer to as "the interface", that is, the boundary area where "civilization" meets "the woods". Actually, all you have to do is watch TV, and you might not be amazed anymore.

Then, just because I like to take things a bit further, I also bought and equipped a small fire truck; of the kind professionals refer to as a "brush rig". Fortunately, as of the date of this paper, I have never been called out on a fire, but it is good insurance, and has helped me in a number of activities around the property.

Basic Theory

Fire needs three things to burn: heat, fuel, and oxygen. This is often referred to as the "Fire Triangle". Remove any one, and the fire lies down. That's really all you need to know. Learn this, and you'll be well on your way to being "fire-savvy". Frightening isn't it?

Basic Practice

It's really just that simple, but as they say, the devil is in the details. Pretty much all of my work in this area has been to remove fuel, and to widely space out the remaining trees. The one important definition you need to know is what I mean by "fuel". Fuels in the forest consist of underbrush, the limbs and tops of the trees removed in harvesting, and the larger

components of the forest floor. These components typically have been the residue and debris left over from harvest operations prior to my acquisition of the property. Fuels also include what we refer to as “ladder fuels”, that is smaller trees and large brush that carry a fire from the ground up into the crowns, or canopy of the larger trees.

Harvesting operations around the property focused on the property edges. This is a defensive maneuver, designed to remove fuel along the neighbors’ lines, which includes Fir Mountain Road. Most of the forested area on the property has been logged before, either by clear-cut or by selective thinning. Either operation style typically left large amounts of flammable woody debris behind.

After the logging phase of my operations were completed, the contractor piled all the woody debris in what are called “slash” piles, that were later burned. The equipment that was used was a large forked grapple, especially made just for brush piling. It rotates 360 degrees and most importantly, picks up only the debris on top of the soil. There was never any soil disturbance in these brush-piling operations, because I wanted to ensure that the piles burned quickly and cleanly.

As a general rule, all harvest operations from start to finish were designed to make sure that the actual amount of soil disturbed, moved or displaced was as close to zero as was absolutely possible. That subject’s not too relevant here, so we have to move on, but it should be mentioned briefly.

OK, so two things have happened by now: we’ve removed fuel, that is we harvested timber, widely spacing the residual stand, and we swept up all the debris and burned it. We’ve also removed heat, because heat is less able to build up in the timber stands I have created in my harvesting operations. So two “legs” of the Fire Triangle have been removed. From a tree-growing standpoint, the forest has been made safer.

Harvest Areas

1. Almost the entire western boundary of the property has been treated in this fashion. You can see pictures of these operations in the photo gallery of the Forestry section. The small exception to the work along the line is around the outlet area of the wetlands. It was a low priority because of its’ small size, and the fact that a fire coming through this area, really wouldn’t go anywhere or cause much in the way of damage.
2. The entire southern boundary of the property has been treated in the manner described. Pictures of this can also be seen in the photo gallery of the Forestry section.
3. The southern half and the northern eighth of the eastern boundary has been treated in the manner described.
4. Approximately one half of the northern boundary has been treated in the manner described.

Thus, we are left with prospective operations along the remaining half of the northern boundary, and northern portions of the eastern boundary.

What to Expect or Do You Need to do Anything?

The short answer is, “not if you don’t want to”. Many people prefer the look of dense woods around their houses, and this is certainly still possible at the logical building sites. I have attempted to minimize as much as possible the threat of wildfire coming from the west, which would be a logical direction, and from the south and southeast.

I enjoy this type of work, but I realize that many people would be either confused or intimidated by it, or simple just don’t want to have work like this done for any number of reasons. If you want to have some similar types of harvesting done on the remaining areas, I would be happy to walk over the sites with you and consult about it, as well as recommend logging contractors I consider to be professional and qualified enough to do the work in the manner I require.