

THE “PRIZE” FIGHT

Discing v. Fireline

May 1, 2007



A cheap tactic used against the spread of wildfire is discing. Discing is an unknown term thrown at property owners in the form of an option for complying with local fire ordinances regarding vegetation management where they reside. In the battle against wildfire, the “Prize” is your home and the fight is which tactic is most effective at saving it! I’ll show you why we think discing is a cheap and often ineffective way of saving the “Prize”.



(Discing defined: tilling the ground to ready it for planting)

Time and money. It seems like everything we do revolves around how much it will cost and how much of our time it will consume. Discing is, at best, a band aid solution to vegetation management. It definitely has its place in the arsenal of vegetation management enthusiasts though. For example, I agree that discing is a great tactic to employ on flat ground riddled with very few large rocks and drainages in a setting away from homes. It is also a good tactical option for the owner of the property when he or she does not care about wildfire safety and is hesitant in spending money on a non-income producing property (vacant / undeveloped). Discing is usually a cheap method for complying with vegetation management ordinances and it can be done fast!

There are some critical limitations of discing. A 30-35 foot wide disc line is not a reliable way to contain a wildfire. Don't buy that? Take a look at the pictures below. They are of a wildland fire that occurred in the City of Petaluma on a rather benign fire weather day. Notice the homes on the perimeter of this fire in the lower left picture. The disc line did nothing to stop this wildfire from taking out their home. What saved this home? Quick and aggressive firefighting efforts on the part of the City of Petaluma firefighters and their mutual aid resources. You can see in the lower right picture that the disc line was to specifications, 30-35 feet wide. What you cannot see in the picture is why it failed.



To understand why a disc line is not a good method for stopping fire you need to understand one very important fact. Discing chops up and rolls into the dirt lots of vegetation that will dry out and eventually burn. In the case photos shown above, that is exactly what happened. The property owner who had the work done complied with the ordinance in full. Was it a total waste of money? I think not. I could very well argue that the "Prize" was saved due to the dampening effect the disc line had on the approaching fire. But, as I said before, I think credit for saving the "Prize" goes to the Petaluma firefighters and company.

For those of you who consider yourselves to be wildfire safety fanatics and desire to save the "Prize" at all costs then, I have a product that you'll love. It is fireline. Don't mistake this product for a disc line. One very important fact that separates the two is that fireline has no burnable vegetation in the line whatsoever and as you

saw in the pictures above, a disc line does. Take a look at what a fireline looks like in the pictures below.



**Rincon Valley, California
Hand-constructed fireline
Protecting 250 homes
By Firescape LLC**



**Bennett Valley, California
Hand-constructed fireline
Protecting 200 homes
By Firescape LLC**



**Titus Fire
Dozer constructed fireline
Photo by Northern Arizona Management Team**

A fireline can be constructed many different ways but I prefer dozer constructed fireline or hand constructed fireline. Both have their preferred applications. Dozer constructed fireline is great for inaccessible steep areas or in areas where scarring of the land is not of great concern. Hand constructed fireline is excellent for around homes especially where aesthetics is highly valued. As you can see in our pictures above, hand constructed fireline looks like a very clean walking trail. Keeping your eye on the “Prize”, let’s tactically compare disc lines to fire lines.

Example: 500 foot line (12 feet wide) near homes on rocky soil with 20% slope in an annual grass fuel model

	2007 Values	
	<u>Disc Line</u>	<u>Fire Line (Hand)</u>
1. Time	Four hours	Four hours
2. Cost	\$500	\$1,500
3. Life span	1 season	Forever*
4. Maintenance	N/A	Semi-annual
5. Maintenance cost	N/A	\$80
6. Meet required width	No	Yes
7. Probability stopping fire	40%	90%
8. Prob. Significantly slowing fire	70%	100%

At first blush, the disc line looks very attractive to the untrained shopping eye. Obviously, \$500 sounds better than \$1500 but if the price is compared with lifespan in mind, then hand constructed fireline wins hands down. ***Fireline will last forever with minimal semi annual maintenance that includes spraying the weeds and removing any fallen branches or trees that may cross the line.** A disc line needs to be re-instated each and every year for \$500. That means every year, you will get the nasty gram in the mail from your local fire agency asking you to once again, comply with the vegetation management codes and ordinances.



(2003 Fireline looks the same as of 5/2007)

Another “must know” about discing versus fireline. Most City codes and ordinances specify a disc line to be 30-35 feet wide. A fireline should be, as a general rule of thumb, 1.5 to 3 times the height of the fuel (depending upon expected flame lengths). Firescape calculates expected flame lengths for every portion of fireline they put into service. Now for another example:

****Uncut field of annual grass standing 4 feet tall****

1. Rule of thumb for fireline states 6-12 feet wide
2. Rule for discing, still 30-35 feet wide per City codes and ordinances

Does the rule of thumb seem as logical to you as it does to me? That’s because it is based upon 100 plus years of scientific data supporting it. The rule of thumb for fireline construction is what is taught to all of us in the firefighting business. It is my assumption that this old rule of discing 30-35 feet around a property edge comes from our very old vegetation management codes that asked property owners to maintain their weeds around their home and property to 30-35 feet away from the home and property line.

So after all this, what is the bottom line? Firescape recommends that the conscientious property owner consider saving time, money and the “Prize” by installing a properly sized, properly built hand made fire line. If you want a vegetation management code loop hole to jump through and you don’t care about your neighbor’s homes or how effective the money you spend on vegetation management compliance is then I suggest you put in the disc line. If you care about the safety of your home and community and you want to avoid the hassle of discing every spring, then I ask you to consider putting in a fireline instead of the minimum required discing. Remember, “Saving Lives and Homes One Yard at a Time” is what Firescape does for you. Keep your eye on the “Prize” by choosing the right tactic, FIRELINE, is how you can win the battle.

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