

MEGHAN'S UNBEATABLE 'THREE FIRE' METHOD FOR LIGHTING A SMOKER

Meghan Milbrath, April 2017

A well-lit smoker is an essential tool in the bee yard. It allows a beekeeper to work with their bees with the least amount of injury or distress to either party. Your goal is a smoker that billows cool smoke while sitting unattended, and stays lit for the duration of your time in the yard. Many beginner beekeepers do not take the time to light their smokers well, and find out that it isn't ready when they need it, leaving them scrambling. Don't be like them. Look like a boss in the bee yard - develop your smoker lighting skills now, and have a well-lit smoker well every time you open a hive (even if you think you may not need it).

You will need

1. A smoker – any style is fine
2. A lighter or matches
3. Two types of smoker fuel:
 - a. Easy to light fuel (newspaper, pine needles, dry grass, dead leaves)
 - b. Smoldering fuel (Wood chips; sumac; pinecones; wetter/greener needles, leaves, or grass; burlap; egg cartons (not styrofoam); balled twine)



This method is called the 'Three Fire' method because you get the fire going in three stages. Its success relies on each fire being properly lit and drawing air before you begin the next stage. The key is to wait until you know the fire is lit well before you go on to the next step. Listen closely, and you will hear the pitch of the whoosing air lower as the fire draughts air by itself. Once you hear a low whoosh (it makes sense after you hear it), you are ready to go on to the next step. If at any point, the smoke becomes less, go back an entire step – removing fuel until the fire is going well.

Start with an empty smoker

1. The first fire

Grab a small amount of your easy light fuel (baseball size), and light the bottom. Quickly drop your lit fuel into the smoker and give a few puffs of air until it is burning well - this means that you want to see flames.

2. The second fire

Once the light fuel is burning well – loosely fill your smoker halfway with your smoldering fuel – keep puffing vigorously as you add it (but not while your hand is in the smoker). When it is drawing, you will hear the pitch of the air puffs drop – listen for a low 'whumpf' rather than a whistling when you pump the bellows.

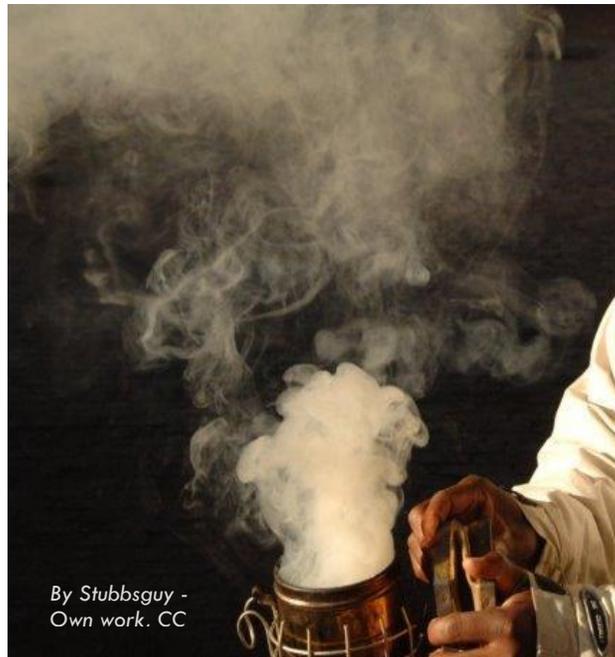
3. The third fire

Once the second fire is drawing air, push down the fuel with your hive tool. Stuff the smoker full to the top with more of the smoldering fuel. Puff vigorously with the cover open until this fuel is lit, and it begins to draw air.

Put the cover on the smoker – puff vigorously until you again hear that it is drawing air on its own, and white rolling smoke comes out of the smoker when it is at rest.

Now you are ready to go into your bee yard - remember to give it the occasional puff if you aren't using it, and to check your fuel if you are out for a long time.

When you are done, plug the end of the smoker with a wine cork or tightly twisted green grass (and put it on something that it can't melt). To make the fire go out faster, tip the smoker on its side. This will smother the fire – preventing a fire in your bee truck, and saving you fuel.



Most common mistakes when lighting smokers:

- 1) **Not getting the fire going well enough before stuffing it full of fuel.** Most of the time if you can't keep a smoker lit, it is because you smother it – it is not drawing air through, so the fire goes out when you cover it. If you take time to make sure it is lit, you'll only have to do it once. To go fast, you must go slow, grasshopper.
- 2) **Choosing the wrong fuel.** If you use only quick burning fuel, your fire will get too hot, and you can turn your smoker into a fire breathing death torch for your bees. If you just use smoldering fuel, it takes forever for it to get started, and you usually can't get it burning well enough to stay lit. For the best smoker fire, use newspaper or something light first, then add in all the smoldering fuel.
- 3) **Not stuffing the smoker full enough.** If you are only going to check one hive, you don't need much fuel, right? Wrong! If you stuff the fuel too loosely, the fire will hit an air gap as it moves up and will go out. Don't be a cheapskate on your fuel. Fill the smoker every time, and just plug it up when you are done. You can use it again later.