

# Roast Your Own

BY STEVEN R. SHER

**M**any lawyers are oenophiles, wine-lovers. This, however, is a relatively expensive and time-consuming hobby, as a quick trip to the Internet shows. Even when using a commercial kit there are many steps and days until you can drink. From scratch? You will need grapes, space, a crushing device (or your feet), cooking apparatus, thermometers and more. Things must be sterile and the grapes themselves are perishable.

Wines are described by generally recognized terms, found on labels, signs in stores or in ads. We see descriptions of tangible properties like body, mouthfeel and tannin levels. Also familiar are the taste and nose (smell) characteristics: woody, oaky, spicy, fruity (or naming specific spices and fruits) and many others.

But did you know that all these descriptors are also associated with coffee? Coffee has body, mouthfeel and acidity, just like wine. And there is fruit, spice, earthiness and many other similar terms used to denote taste and aroma. I am referring here to what are known as “single-origin” coffees, beans from one farm, one locale or one country, rather than the mass-produced commercial blends most of us are familiar with.

The complete process of wine-making turns grapes into a wonderful drink. For coffee, the activity that turns green beans into a wonderful drink is called roasting, a relatively inexpensive, easy and short process that can be done simply at home. Of course, like everything humans put their attention to, roasting can also be amazingly complex.

For example, one can roast in a popcorn air popper, a metal dog food bowl with a powerful heat gun or even in a cast-iron skillet on the stove. There are many articles online that instruct how to use air poppers “as is” or with modifications to give more control over the process.

In addition, there are dedicated home-roasting machines, from cheap (\$150 to \$300) to quite expensive (thousands of dollars). What one gets with more money is a greater capacity, and again, more precise control of the roasting. You will still need a grinder (from \$50 to \$700) and a brewing device (from \$40 to thousands). Since green coffee beans are cheaper than their roasted counterparts, you can quickly recoup your investment in equipment.

How do I know all this? I used to hunt garage sales. On one of these forays I found a home coffee roaster made by Melita, a recognized coffee brand, new in its box. Being curious, I paid \$6 for it, but, thinking the process would be difficult, and as I am sort of a perfectionist, I immediately put it away not wanting

to screw it up.

Literally years later I came upon it at the bottom of a closet and decided to see what it was all about. Opening the box, I found not only rather simple instructions but a sealed-in-plastic half-cup of green coffee beans! Thinking they would be far too old to use, but again curious anyway, I processed them as per the surprisingly easy directions. About 15 minutes later I had roasted coffee. It smelled okay, so I ground some up and brewed a cup. Unable to believe what was happening, and dancing joyously around my kitchen like a man possessed, I was drinking the best coffee I had ever tasted, old beans and all!

Kicking myself for having waited so long to try this, I soon found a couple of local sources for green beans sold at their roasted prices. By selling me unroasted beans at “roasted” prices, the sellers, accustomed to selling roasted beans, would not have to take a loss by selling me unroasted beans at a discount.

Not long after that, in November 2002, I saw for the first time an ad for a much more sophisticated home roaster and I jumped to order one.

Roasting coffee takes very high heat and those early machines were prone to electrical failures. Nevertheless, as one and then another died, I replaced them. As I found other brands, I bought one or two and as they improved I upgraded them, as well. The current roasters are much more reliable.

What, then, is the major advantage of home roast? In a word: freshness. Ground coffee goes stale in a day or two, no matter how it is stored. Roasted beans remain fresh for a week or so, but then they too, rapidly fade. Greens are good for many months and even beyond a year. No matter how basic your equipment and technique are, almost invariably your roast is better than anything from a store simply because it is so fresh. Even vacuum-packed whole beans and beans loose in store bins are no match in freshness to what you can do at home.

As an aside, if you drink coffee (or buy beans) from one of the newer “gourmet” coffee outlets, try to purchase from one that roasts on premises or gets its beans very locally and often.

The other major advantage to roasting at home is the complete control you have of the many important variables involved in and affecting a bean getting from the coffee tree to your mouth. A short list: the type of bean you buy, including country, county or even farm of origin, growing altitude, weather and the manner of processing the coffee fruit into the bean; the roasting process; the all-important roasting time; grinding method; and the brewing system (myriad ways just for this: French press



pot, percolator, manual drip, automatic electric drip, pour-over with paper filter, vacuum pot and more).

So, now, roasting. While even experts are not completely sure what happens to coffee when it is roasting, briefly this is what occurs. Shortly the greenish beans turn yellowish and then light brown. Heat forces moisture out, drying the bean. As it dries it expands (swells) and soon the woody parts begin to crack, audibly. Volatile oils that create the smell, or aroma, are driven to the surface and starch turns into sugar and caramelizes. All this affects the taste. Meanwhile, the beans continue to get darker. Depending on the type of bean and the flavor you are seeking, the roasting can be stopped anytime after light brown, but before really black.

What, then, is the effect of roasting on taste? Beans of different origins have different inherent tastes (and aromas, since after all most of taste is really aroma) characteristics. Some “taste” like fruit, including blueberry, peach, mango and other flavors. Spices? Cardamom, cinnamon, clove, pepper and many more. Some taste earthy, flowery, nutty or even like tobacco (!). And then there is “chocolate.” The varied “origin tastes” emerge early in a relatively light to a medium-plus roast. These are terms of both time and color. Each level also has several names (like American, City, City Plus and French) we roasters use to differentiate the minute differences in a roast’s length and color, all of which affect the taste.

As a roast’s time and color increases and darkens beyond medium plus, these origin tastes of fruit, spices, etc. begin to diminish and what is called “roast flavor” characteristics emerge. The taste becomes more complex as origin and roast flavors merge. Some feel this is the ideal roast. With more time, fruit, spice and flowery flavors fade along with acidity. The heavier mouthfeel called “body” increases, as does sweetness, or more accurately, bittersweet. Any chocolate flavor may also turn

bittersweet. Roast characteristics give the coffee a “darker” and more pungent taste.

Roast-level preferences are as varied as people and their personal likes. Some love lively, acidic, fruity, spicy low-body coffee. Others like the heavier, darker flavors with more body and less acidity. Many like both. Interestingly, you can try combining different roast levels of the same bean, in the same cup, to get the advantages of both lighter and darker characteristics. The results of all this are infinite and in your own roasting you can try it all and create whatever flavor and taste profile you want each time you roast.

Finally, a strange irony. All these flavor notes, fruits, spices, chocolate, etc., I have just written about, I can taste almost none of them! Apparently some people are “super tasters” and some are not. I am not. Because of taste bud physiology, some of us get much more taste (and aroma) sensation, and some of us less. My personal holy grail of coffee taste has long been chocolate. But as many beans claiming some chocolate note as I have tried, I have never gotten there. I have even asked my suppliers for help or suggestions. Here is a response from Maria of Sweet Maria’s: “When a coffee is described as ‘chocolaty’ that does not mean it tastes like a chocolate bar, but rather there is a hint of a flavor or aroma that suggests chocolate. People do vary a lot in terms of ability to taste and smell. I know Tom [her husband] tastes things that I don’t ...”

If all this interests you, there are many sites on the Internet that sell beans, roasting equipment, books and, most importantly, give information. Search “green coffee beans” or “home coffee roasting” and you should find all you need. Enjoy! ■

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