

## Farnum Hill Ciders – Varieties and Methods (May, 2011)

### Climate/Conditions:

Selection and propagation of cider varieties has followed long testing in our climate and soils, resulting in the judgment that our apple variety selections achieve extraordinary intensity and character under local conditions. Other places they would not necessarily grow, taste, or look the same. Indeed English and French growers who have visited here confirm that in some cases they look, taste and even bear better than at home: Kingston Black, a notorious pain in the neck to grow, behaves pretty well in New Hampshire. Of course, that may also be because weird apple trees don't frighten us. We've been growing apple trees here on Farnum Hill for a long time, and know how to persuade them do our bidding, at least some of the time.

A four-month growing season, heavy glacial soils, extreme temperature swings in Fall between day and night all, along with October frosts, contribute to intensification of flavors here. In general we find most concentrated, nuanced flavors come from the later-picked varieties, harvested late October. We believe that frost injury to the spur leaves of the fruit causes a sudden rush of photosynthates into the apple flesh, just before harvest. Meanwhile, a few earlier-ripening varieties seem to enjoy our compressed growing season, and produce juice with consistently admirable character.

### Apple Varieties

**Bittersweets**, containing high tannins and sugars, provide structure, and a certain breadth of aromas & flavors as well as range of sensation, deeper fruit and some of the high tropical perfumes. Varieties such as Dabinett, Yarlinton Mill, Chisel Jersey, Ellis Bitter, Ashton Bitter, Somerset Redstreak, Medaille d'Or, odds and ends of others.

**Bittersharps**, containing high tannins & acid, contribute considerable flavor as above, but also critically important acid for clean fermentation and stimulating taste. Varieties include Kingston Black, Stoke Red, Foxwhelp. Of these, Kingston Black is the most famous back in Britain, and has long been used for single-variety ciders there. We only ever use Kingston Black by itself, but Stoke Red and other bittersharps are essential to our blends.

**Heirloom Varieties** We grow a lot of heirloom varieties for eating/cooking, but a tiny few turn out to be very valuable in fermented ciders. Specifically Esopus Spitzenberg (Thomas Jefferson's favorite apple, reputedly) Ashmead's Kernel (three hundred years old, fabulous flavor & acid, English), Golden Russet (colonial American, very commercial for all purposes before Independence and right on up to the early 20th century, known way back as a good cider apple), and Wickson (tiny, American, not as old as the others, and a superb source of acid). They all contribute fascinating aromas and flavors, and provide the acidity that the bittersweets lack. We've tried fermenting most of the dozens of heirloom apples growing here, and usually the results are boring, disappointing or even horrible. But the Spitz and Ashmead's are so good that we've grafted over to more. And we've planted a few thousand trees of Spitz and Wickson in the last few years.

**Modern varieties:** Believe it or not, Golden Delicious, but not just any Golden Delicious. We use a strain which at our place grows small, hard, russeted, high in acids and sugars and intensely flavorful. Recently also a little Elstar, a Dutch variety of moderate distinction for eating which is helpful with acid, sugar, and nuanced flavor of its own in blending. These newer apples help elaborate and articulate some blends, and of course they help in the quest for acid. We're beginning to get interested in Ida Red, as well.

### Pressing

Using tasting, testing for sugar and acid, and experience with varietal characteristics, we put together batches of apples on their way into the press, then press into small tanks so batches can be adjusted on their way into fermentation tanks and barrels. Experience, tasting, knowing how the fruit grew this year and how much we have of each variety -- these are the guides. Goal is to end up with enough sugar in each batch to yield at least

7-8% alcohol, plus good acid and bittersweet character, plus good flavor at end of fermentation. We expect flavor to improve with later blending, of course. Can't always use the whole crop if we want to meet these goals.

### **Fermentation**

To full dryness, because we find that's the way to bring out the full character of the fruit. Inoculate with characterless champagne yeast, which tolerates low temperature. Slow fermentation, generally between 40-55 degrees F. Ferment out in all containers, ranging from 2000-gallon tanks to neutral oak barrels. Rack with relative promptness unless a batch might gain something from standing on its lees. Months to ferment, more months to mature. Serious blending begins.

### **Blending**

Taste, taste, days and weeks of notes, think, taste, decide on blends. Occasional blending across harvest years. Five people taste, usually blind except for Steve, Nicole, or Brian, whoever manages the samples. Hard to summarize, because complicated and different every year. We are lucky to have had the same crew tasting together for years – we don't need to rely on any one person's sensory memory.

### **Filtration**

Constantly reducing the amount of filtering we do. Decide on filtration case-by-case. FH ciders usually drop clear and bright without filtration.

### **Reintroduction of sugar**

(Though done in the tank, this is like the "dosage" of champagne, though much less assertive.) Goal is to bring out the fruit notes in the Semi-Drys, not to sweeten. Never yet more than 7.5g per liter; usually less.

### **Reintroduction of CO2**

Some dissolved CO2 is present in the still ciders. The small bubble in the petillant ciders is achieved by gentle reintroduction of CO2 at very low temperatures through a stone, then letting cider stand until bubbles are tiny and gradually released.

### **Style**

Our emphasis on acid is very different from the low-acid styles of French ciders. We like the cleaner, fruitier outcome and the compatibility with food that comes with relatively high acid. Bret is anathema here, though traditional in some regions. Also, our ciders are mostly different from English styles -- less tannic than they often are. Though in 2008 we started farm-gate sales of still bittersweet ciders – these do reach out to the West Country ciders of England, and of course include many of the same apple varieties. None of our ciders resemble the sweet, fizzy, cheap, concentrate-based, college-student-pleasing ciders found in sixpacks or indeed, in many mass-market British and French brands.

**Future plans;** We'll keep experimenting with single-variety ciders (Kingston Black and Ashmead's Kernel have pushed up the cider price ceiling in a very helpful way in recent years). But, as seasons pass, we are increasingly convinced that the best, most pleasing ciders are made by the blending of a number of different apple varieties. Very few apple varieties contain the balance of acids, sugars, and tannins to make a 'complete' cider on their own – even the very best ones usually want company in tanks, barrels, and bottles. Meanwhile, we've begun work on a new notion, 'Dooryard Cider,' which will vary from batch to batch more than our established ciders do. As for aging, we have done a few tiny experimental bottlings, one of 2003 Ashmead's Kernel that distinctly improved from year to year for about four years, then seemed to level out. We sold it in 2008. On the whole, though, we think it's unlikely for most ciders to continue improving after maybe a year of maturing in barrels or tanks. Most good orchard-based cider gets as fabulous as it's going to be within a year or so. Our ciders hold very nicely in bottle at cellar temps for 3-5 years, after which we think probably their more subtle, flowery charms tend to wilt, though they remain solidly drinkable.