
APPLE NOTES '16

Producing the 2016 Crop...

Harvest time 2015 came on early, and ended early. With strong sales from the start, we finished up harvest in early October. Immediately after the end of harvest, we shut off water, drained waterlines, cleaned up equipment and cider presses, stacked bins, and put everything away for winter. Pruning began on schedule in February, and ran through March. Usually, the trees are still dormant as we end pruning. This year, buds were swelling and blossoms were preparing to open. In a typical year, we expect to see full bloom around mid-May. Last year, we were giddy when full bloom occurred on May 4. This year, it happened on April 21! We found ourselves scrambling to get pheromones out for codling moth by bloom time.

In the past, whenever we have had an "early" bloom, we have experienced a long, difficult frost season. So, when full bloom happened on April 21, we fully expected some long, sleepless nights. However, the happy anticipation of getting to use our new wind machine mitigated the prospect of a long frost season. Alas, frost season proved to be a big nonevent - we had no frost and never had a chance to test the new wind machine.

Our beekeeper suffered a significant loss of hives over winter. As a result, pollination of early varieties farthest from the hives was marginal. In other areas, pollination was spotty but, overall, adequate.

In June, we completed phase 2 of our efforts to increase water pressure in the far reaches of the orchard by installing an auxiliary water line into the new, east orchard. What a difference it made! We now have fully functioning drip emitters throughout the new orchard.

In addition to the water line, we kept busy throughout the summer weeding, mowing, training our English cider apples to grow on a trellis, constructing additional apple bins, and getting dehydrated. As of mid-August, we have the promise of an excellent crop of McIntosh, Cortland, Wealthy, Empire, Golden Delicious, and Spartans. Just like last year, we fully expect harvest will be done by early-to-mid October.

Opening day...

By the time you receive these Apple Notes, Williams Pride harvest will have come and gone. The Williams Pride surprised us and came on in mid-August. It has been a challenge to adjust to the unusually early seasons we have experienced the past two years. We wonder, is this the new normal? Our best guess is that Summer Red harvest will begin at the end of August, followed shortly by Wealthy, then McIntosh, Cortlands, Empires, Golden Delicious and Spartan. Please check our website (www.bishop-orchard.com) or our Facebook page for the latest harvest schedule.

Hours...

Our hours are 9:00-5:00 on weekends, and 5:15 to sundown Thursday and Friday. **THE CIDER PRESSES ARE ONLY AVAILABLE ON SATURDAY AND SUNDAY.** We are not open on school holidays or weekdays other than Thursday and Friday evenings. If you are coming to pick on Thursday or Friday evening, please allow sufficient time to finish picking before dusk. This is important. Wandering the orchard after sundown is risky because it is not only too dark to see what you

are picking, but it is too dark to see sticks or anything else that could cause you to trip.

Also, cider makers should keep in mind that we do close at 5:00 on weekends, so try to arrive at the orchard early enough to be finished by 5:00. We won't kick you out if you are still making cider at 5:00, but it does make it hard for us to wash up, move bins, and dump pulp.

Cider...

We should have a good selection of apples for cider this year. We anticipate having enough apples for cider by Labor Day weekend, or the weekend following. You can confirm this by checking our website or Facebook.

PLEASE REMEMBER TO BRING YOUR OWN JUGS!

We often have a limited supply of jugs for first-timers who don't realize they need to bring jugs, and for those of you who simply space out and forget to bring jugs. Also, we try to have jugs available for those of you who get carried away and make more cider than you have jugs. However, please keep in mind that demand can quickly exceed our supply. It is tough to see the disappointment when somebody drives all the way to Garfield to make cider without jugs, only to discover we have already exhausted our supply of jugs. If you have to, you can always tie a string around your finger as a reminder to bring jugs...

Now, for the ever important words regarding the safe handling of raw food: All natural fruit juice is susceptible to contamination by harmful bacteria if it is not properly handled. Apple cider is no exception. The biggest risk of contamination comes from those handling cider. To reduce risk of contamination, ALWAYS wash your hands before you begin making cider, and keep them clean while you are making cider. Improperly cleaned jugs can also be a problem. We clean our jugs by placing one or two teaspoons of automatic dishwasher detergent in each jug, then filling it with hot water. We then cap it and let it stand for several hours, followed by a thorough rinse.

Using good food preparation habits while handling cider will minimize the risk of bacterial contamination. However, the only practical method we know of to eliminate the risk is pasteurization. Pasteurization is quite simple; it involves heating the cider to approximately 160° F., then cooling and storing it in good, clean containers. Harmful bacteria are generally eliminated once the cider reaches 145°, but 160° provides a reasonable margin for error. We suggest using a candy thermometer to monitor the temperature. By no means should you boil the cider - boiling destroys the unique flavor of cider. Once pasteurized, the cider should be refrigerated and treated with the same care as other food.

The busiest cider times - and hence the longest waiting lines - occur Saturday and Sunday afternoons, so if you can, we suggest scheduling your visit to the orchard in the morning. Also, to keep the waiting times as short as possible on busy days, please try to organize your cider helpers to work efficiently, yet still have fun. You can also speed things up if you review the cider safety handout to familiarize or re-familiarize yourself with food safety issues while waiting your turn for a press.

Out and about the orchard in 2016...

As many of you long-time customers will recall, in early October, 2009, we experienced an unusually sudden cold snap after a long, period of beautiful, warm fall weather. On Friday, October 9, weather forecasts predicted a sudden change; temperatures were predicted to fall into the low 20's. We were just finishing McIntosh harvest and beginning Empire and Spartans. The Empire crop was especially good, and every tree was loaded. We spent the day picking as many apples as possible. By nightfall, we had filled every bin and had filled all of the wash tubs with apples. That night, the temperature dropped precipitously. The apples we picked the day before were the last apples harvested that year. By Saturday morning, the temperature stood at 10°, and every apple left on the trees was frozen solid. As the apples thawed through the day, they turned to mush. That night, Saturday night, the temperature again plummeted, all the way down to 6%.

We quickly realized the loss of the crop was the least of our problems. Since the freeze, many of the older blocks have declined significantly. Each year, more branches and whole trees have died, and the affected blocks have become bi-annual bearers, with smaller and smaller fruit each passing year.

Recognizing that some of the older blocks were on borrowed time, in 2011 we began aggressively planting new blocks of McIntosh, Cortland, and Golden Delicious. These new blocks are now beginning to bear fruit.

Last fall, after harvest, we also initiated a plan to renovate the older, freeze damaged blocks. We plan to phase in the renovation by removing the most affected trees first. To this end, in late October, we pulled a block of Empires and Gravensteins to make way for a block of Liberty apples. The Liberty apples will be planted next spring. We actually had intended to plant them this spring, but they broke bud in February, before they could be dug for transplanting in the orchard. To avoid any unnecessary trauma to the trees, we opted to leave them in the nursery until next spring. If all goes well, we should be able to begin cropping them within three years after planting. They will be grown on trellis. The rootstock is a newly released variety from New York known as Geneva 41, or "G41." The G41 rootstock is immune or resistant to known forms of apple replant disease. Replant disease occurs when new apple trees are planted on ground which older apple trees have recently been grown. The affliction results in stunted, unproductive trees. The precise cause of replant disease is not well understood. Traditionally, soil fumigation has been used to combat the disease. We opted not to use fumigation because of its negative impact on the environment. As such, we are quite excited to try G41. The G41 rootstock produces fully dwarf trees which, when mature, should be not more than eight to ten feet tall (we sure hope they won't be taller, because the trellis will only be eight feet tall).

In addition to the Liberty apples, on a hot day in early August, we delivered budwood to the nursery for McIntosh, Golden Russet, and Roxbury Russet trees. The trees will replace what remains of the first trees we planted in the new orchard in 2008. Those trees were exposed to herbicide drift at a very early age and have declined to the point where few remain today. The remaining trees will be removed this fall, after harvest. The new trees are also budded to the G41 rootstock and will be trained on a trellis. The trees will be planted as single, dormant bud trees (known as "Sleeping Eyes") next spring. The trees are now growing at Cameron Nursery near Eltopia, Washington. If the weather next spring cooperates, they should be in the ground in the orchard before the end of April.

We also have on order rootstocks to be budded next August for planting in the spring of 2018. These trees will

replace our oldest trees in the orchard, which we planted in 1978-79. We have not yet decided on what varieties will be planted; if you have any suggestions, please don't be bashful about letting us know your thoughts.

English cider apples...

As many of you know, some of the apples we produce are used for hard cider. Hard cider is made from fermented apple cider, just as wine is made from grapes. All of the apples now growing on trellis in the new, west orchard are English cider apples, as are several short rows of larger trees in the new orchard. Those rows are identified by signs at the head of each row. The English cider apples may appear tempting (or not), but they are not very tasty - in fact, they are quite bitter. These apples are grown for Liberty Ciderworks in Spokane, and are not available for u-pick; we ask that you not pick them.

Now, you might ask, why the heck did they mix plantings of off-limit cider apples with other apples if they don't want us to pick them? The answer is simple: when we acquired the new, west orchard ground, we planned to use it only for cider apples. However, the 2009 freeze quickly changed the plan; we knew we were going to lose many of the older trees, and we needed somewhere to plant replacements without completely disrupting production. Hence the mixed blocks - not ideal but better than closing down u-pick production until we could bring replacement trees into production.

If you are interested in the end product from our cider apples, Liberty's tasting room is located at 164 South Washington, Spokane. Liberty cider is also available in many locations throughout Washington and Oregon. You can check their website (libertycider.com) for additional information. If you are a hard cider aficionado, we think you will find the cider delightful...and how could it not be? It is made from apples grown right here, at Bishops' Orchard!

Prices...

Apples remain at 50¢ per pound, and cider prices will remain at \$6.00 per gallon.

Some final comments...

- ▶ We encourage apple pickers to bring a picnic lunch to enjoy under the shade of an apple tree or in a private corner of the orchard. You can also explore the new orchard, if you wish.
- ▶ We do not presently have a café in Garfield, but we are pleased to have Becky's Meet Shop, Too, where you can get espresso, snacks, and sandwiches or wraps. Search Facebook for Meet Shop, Too, to check her hours.
- ▶ Please don't climb the trees; the limbs are very brittle, climbing breaks off fruiting spurs, falling from a tree can be really embarrassing as well as harmful to your health.
- ▶ The orchard floor has sticks and windfall apples - please watch your step to avoid falls.
- ▶ Please remember not to park in front of the homes across the street from the orchard.
- ▶ And finally, **please have fun when visiting the orchard!**

See us on Facebook or visit our website, www.bishop-orchard.com.