

Coco Ranch

Growers of Fine Organic Tree Fruit

Putting Apples in Storage

High-tech home storage: Empty crisper bin in your refrigerator. Fill with apples. Our dense, long-season varieties such as Fuji, Granny Smith, and Cripps Pink, picked at full maturity, will keep for months. The earlier, shorter-season apples such as Gala, Sommerfeld, and Braeburn, which are less dense and have lower acid, do not hold up well in storage. Red Delicious, a shorter-season apple adapted to Washington State's limited growing season, does not store well, as many of you have experienced. (We grew Red Delicious as pollinators in our former orchard. They were ripe in July and, eaten fresh off the tree, *were* delicious; a week later they were mealy and insipid.)

If your household has a second refrigerator you can manage especially for apples, set the temperature to 34°F, the ideal storage temperature. But be careful not to let the apples freeze or they will be ruined. Fall freezes are the stuff of nightmares for Washington apple growers; in 2002 most of the Washington Pink Lady apple crop was destroyed just before harvest in a November freeze. It was heartbreaking to see the photos of all the ruined apples on the trees.

Low-tech home storage: Put your box or basket of apples in your garage, preferably on the cool concrete slab floor. This is what we do. We wish we had a basement or a root cellar, but we haven't, and there isn't a stitch of room in the refrigerator. We have enjoyed our Fuji, Granny Smith, and Cripps Pink apples, left simply in boxes in the garage, as late as March. Their character slowly changes and develops as they sit and respire. The skins wrinkle, the natural waxy coating on the apples increases, but they are aromatic, flavorful, sweet, and even crunchy on the inside. As the winter months go by we find we eat fewer of them out of hand and cook more of them, fried for breakfast, as applesauce quickly made for dinner, stuffed with raisins, honey, and nuts baked for dessert, or in a pie or tart for a treat.

I have books that illustrate and describe slatted wood racks for setting evenly spaced apples out for storage. While the Shaker-like beauty of this arrangement appeals to me we never seem to have the time to do more than plop some apple boxes on the garage floor. Some of the apples do rot, or more accurately, ferment, for they fill the garage with the wonderful, heady fragrance of cider. If you store sound whole apples, this fermentation affects only an occasional apple and does not proceed especially rapidly to other apples. These fermented apples or portions of apples and the whitish yeast you may see on the surface are not dangerous (they are the makings of cider) and you may happily eat the sound apple parts and the adjacent whole apples. (Be aware, however, that conventional apples are coated in the packing house with waxes and fungicides designed to penetrate the apples to extend shelf-life. When these apples do eventually decay, the organisms will not be the friendly, edible cider yeasts.)

It was not so long ago that families stored apples into winter as a matter of course. I spoke with a middle-aged woman from Japan who wistfully described to me her childhood memories of wrapping Fuji apples individually in paper and storing them in drawers in her house. And

recently a man reminisced to me about his New England childhood in the 1950s, bringing home bushel baskets of apples to store in the basement for the family to eat in the winter.

By buying apples out of storage grocery stores manage to have many different varieties of apples that ripen at different times simultaneously available all year long. But the resources spent on storing apples are more than most shoppers realize. It being our keen interest, we have long made a habit of studying grocery store apple displays wherever we go, and often see long-stored apples appear in the displays when new crop apples are readily available. For instance, in 2003, two weeks after we harvested our Galas, our local grocery was selling six-month old organic Galas from New Zealand, and then when we were harvesting Braeburns, six-month old organic New Zealand Braeburns appeared in their display. The stores like to buy these old apples out of storage because they can get them for low prices, for the farmers know that very shortly they will only get the much lower juice-apple price for their crops.

Before we bought our ranch, we grew apples for ten years on leased land, and every year, we put part of the crop into storage for later sales. Some apples went into sprawling old ugly refrigerated buildings and some went into the more expensive newer controlled atmosphere storage --- the surreal Stockton domes, cold storage where the oxygen is excluded and humans can survive only in space suits. The orchard bins, each with about eight-hundred pounds of fruit, are forklifted directly into the cold storage rooms. When the buyers are lined up the bins are loaded on trucks and sent to the packing house where the fruit is run through the packing line, a factory-style operation that sorts the fruit into various grades of eating apples and separates out the rejects, or culls, which are sold for juice.

When the fruit is sent directly from the orchard to the packing house we can hope for a pack-out of 75% (75% eating apples, 25% juice-apples) but with storage the packout declines, sometimes frighteningly, for the price paid for juice-apples can be less than the cost of the picking alone of those apples.

We always felt a sense of relief when the last apple was sold out of storage. It is a nervous business watching the global economy and monitoring inventory. We are careful economists and keep good records. In all the years we sold out of storage, we never once, after storage costs were accounted for, did as well as selling apples fresh.

In the old days the buyers bought apples at harvest time and took care of their own storage, but now this responsibility has been shifted to the grower. Industry experts call this "maximizing supply chain management," credit Wal-Mart with showing the retail world the way, and laud the efficiency of the system. I call it pressing the participant who is in the weakest negotiating position to shoulder the greatest risk. And the risk is real. The cold-storage facility gets paid, the packing house gets paid, the trucker gets paid, the sales agent gets paid, and then the grower gets what is left over. Sometimes there isn't anything left over and the grower gets a bill instead of a check for the crop.

Not long ago Greg spent some time shooting the breeze with Bill, who works for C.F. Fresh, the organic marketing agent that sells most of our Gala apples for us, after the two of them had

walked through our orchard together evaluating the possibilities of next year's fruit set on the Galas. Bill is an adventuresome fellow. He travels regularly up to Washington and down to Chile and occasionally to New Zealand to keep up with the apple crops, getting in some surfing when he can and periodically breaking bones and teeth. He provides us with first-hand accounts of the action in the apple world.

"It's worrisome," Bill reports, "Stemelt, the Washington packer/shipper giant, now owns all of the best organic apple land in Washington and it is building a huge organic cold-storage and distribution facility."

"And how," Greg asks, "did Stemelt come to own all those orchards?"

"Foreclosures --- land, orchards given up in lieu of monies owed to Stemelt on apple crops that cost more than they returned."

These days we have sworn off storing apples for sale. The apples we are unable to market at harvest time we will make into cider or feed to appreciative, chortling geese. And when all the apples are harvested we will draw in, like the trees themselves, to rest, to prune, and to regenerate for the next season, for next year's blossoms, codlings, and fruit. We will set aside some baskets and boxes of apples in our garage for our family to eat in the coming months. Sometime in March we will run out, and then we will not eat another apple out of hand until August when, with great pleasure, we will bite into our first summer apples --- light, crisp, sweet, fresh Galas.

We encourage you to try storing some apples for your family for the winter. It is a modest family project. Take a little risk. Viewed from a family perspective, an energy perspective, an ecological perspective, a local perspective, it has a certain *efficiency*. And perhaps, if we work together, local apple orchards, owned and farmed by local farmers, will be present in the lives of our children and grandchildren rather than be just a memory from a long-ago time and place.