Dry Farming Vines for Mendocino Eco-Winegrowing Symposium July 20, 2011 By Terry Harrison

Community Alliance with Family Farms (CAFF) has been working in the area of sustainable agriculture and helping farmers with better techniques for over a quarter century. Over the past two years, we put on two field days in Sonoma County and one in Napa County on dry farming wine grapes. Speakers included Paul Bernier, who farms in the Dry Creek Valley, John Williams and his vineyard manager, Frank Leeds, at Frog's Leap Winery in Rutherford, Will Bucklin, owner of Old Hill Ranch in Glen Ellen, and Joe Votek of Loma del Sol, who has quite varied experience.

- All were using deep rooted rootstocks, St George and 110R being most common.
- The varieties included Zinfandel, Petite Sirah, Carignane, Cabernet, Malbec, Merlot, Syrah, Chardonnay and Sauvignon Blanc, which are most of the common varieties.
- All were spaced from 50 square feet per vine up to twice that except for some of Joe's vineyards, which are 32 sf.
- Most had little or no trellising.
- The average annual rainfall is enough to saturate the soil in all of these areas, varying from 25" in Napa to 40" in Healdsburg which is close to the 37" here in Ukiah.
- Paul Bernier makes compost on one of his farms with equipment he designed and built himself and applies 10 tons/acre of compost every fifth year.
- Paul Bernier and Frog's Leap cultivate a minimum of 5 or 6 times/year. Frog's Leap cultivates more deeply to reinvigorate a vineyard where vigor has declined. Old Hill cultivates between the rows with low cover beneath the vines. Joe cultivates every other row. I threw in our little Sauvignon Blanc Vineyard because it represents an extreme case of abundant water. With that variety on AXR with 8 x12 spacing on a deep clay loam soil, we had excess vegetation until we switched from cultivating to a permanent cover which we mowed. We reseeded every 5 or 6 years.
- There was general agreement that capital costs for establishing a dry farmed vineyard were less than an irrigated vineyard.
- All the grapes produced go into premium wines and yield is controlled.

I am not suggesting that there aren't vineyards that need irrigation, but that there are a great many that probably don't.

So, if this is such a great way to grow really high quality grapes, why did we ever switch to drip irrigation? When we planted our vineyard in 1974, drip was just coming in – no one in Sonoma County carried drip hose yet. Prior to that practically all wine grapes in the North Coast were dry farmed. The main reason for irrigating, as I remember it, was to get better yields. That is great for the Central Valley, which is hotter and drier, but is not what we want here. I think another factor is our love of high tech in the US. We are always looking for the newest way. It is often better, but sometimes is not. When LA

took out public transportation and when farmers started using new pesticides, lead arsenate and later DDT, those were not better ways. When tractors replaced horses, it took 15 years before tractors were more cost effective than horses but every young farmer had to buy a tractor.

Frank Leeds, vineyard manager at Frog's Leap, is essentially farming the same way his family has done since prohibition. There are a lot of vested interests in our industry who will never admit that costly drip irrigation is often not needed on the North Coast. John Williams, winemaker at Frog's Leap, pointed out that most wines are now vinted from high alcohol, late maturing grapes which are manipulated in the winery with reverse osmosis, mega purple for color and so on. He suggests this is a real threat to the North Coast because the end product is more a function of chemical engineering than the grapes, lessening the difference between wines made here and those in the Central Valley where they are thrilled this year at a price for Thompson Seedless of \$250/ton. Personally, one of my favorite wine memories is a Louis Martini 1947 Zinfandel I bought in 1960 made from ancient dry farmed vines. It was \$1.25/bottle, around 12% alcohol and had a more intense varietal character than many of the zins on the shelf today. It is hard sometimes to accept that the old way may be the best but that is the conclusion that my old palette has come to.

California Agricultural Water Stewardship Initiative has more information about other dry farmed vineyards. See www.agwaterstewards.com.