

Carolina Heritage Winery
Elkin, NC



As the owners of North Carolina's only organic winery, Clyde and Pat Colwell might seem like lifelong advocates of organic living. But in fact, they are recent converts. An Environmental Biology class at Central Carolina Community College inspired them. "[It] opened my eyes," Pat says. "I just had no idea all the chemicals that they use. I mean, I didn't grow up as a farmer, I didn't know, I just went to the store and bought my food like anybody else, I had no idea." She recalls using a microscope and running tests to see the effects of chemicals on soil. The class

woke Pat up and gave her direction. "Our generation has done a lot of good things," she says. "Technology advancements in the last few years are mind-boggling, I mean we went from black and white little TV sets to i-phones! [We've made] tremendous progress in Civil Rights, both racial as well as gender, I mean it's not perfect, but tremendous gains... But I think we really screwed up the environment. So I guess for me personally, it sort of became, if I'm going to do anything with the rest of my life, it's going to be to help the environment."

Pat was set to retire from a career at IBM; she planned to join the Peace Corps and hoped to gain some qualifications in agriculture before going. In the midst of taking classes, she met Clyde, who had retired from a career in education but resumed teaching because he was bored. They were married. "We started having one of those, 'What should we do when we grow up' conversations," Pat recalls. Clyde told her he'd always wanted to have a vineyard and winery. "I literally did not know a grapevine from a petunia," Pat says, "except that I knew they sprayed a lot of chemicals... So I said, I'll tell you what, if we go organic, I'm in." Clyde said okay. "He didn't have a clue what that meant, but he said okay."





They learned about growing organically from the Pittsboro-based Carolina Farm Stewardship Association (CFSA) and the Organic Growers School at Blue Ridge Community College. They also studied on their own. Clyde had made homemade wine, but they wanted training so they enrolled in the Viticulture and Oenology Program at Surry Community College. The actual wine-production was straightforward to do organically– they just needed to use organic yeast and nutrients, non-

GMO sugar, and no caustic cleaners. They found these ingredients at Scott Labs, who had an organic wine specialist on staff who gave them advice and answered questions.

The Colwells realized they'd have to leave the humidity of the Triangle to grow organic grapes. They searched for property in the Yadkin Valley and found an abandoned home site and property covered with brambles. "We have a backup crop," Pat jokes. "If the grapes die we'll make lots of blackberry wine." In 2005 they planted their first grapes. They retired and moved to the new land, working to renovate the farmhouse but ultimately deciding to build a house and tasting room so they could get to work on making wine. They located the winery underneath the tasting room to make use of the below-ground coolness. With the winery built and the land certified organic in 2008, they harvested their first grapes and opened in the fall of 2009.



The Colwells picked American hybrid grapes because they have the best chance of success when grown organically. European varieties produce tight clusters of fruit, which are more susceptible to mildew. The hybrids (made from a European variety and a native American variety) have a looser cluster that allows air flow around the fruit. They grow on a Scott Henry trellis system that splits vines in two directions and

leaves a clear "fruiting zone" to allow air to circulate and sunlight to reach the grapes. When mildew does occur, the Colwells use organic sprays like neem oil (made from the seeds of the neem tree), Stylet Oil (a mineral oil), and Regalia (a plant extract that triggers the grapes' natural defense systems). One benefit of recent summer temperatures is that over 90 degrees, the mildews do not grow, so the Colwells have not had to spray for several years.



In addition to humidity, their biggest foe is insects like Japanese beetles and June bugs. They have chickens (who eat the grubs) and Guinea hens (who eat the bugs, which drop towards the ground after mating; Pat says they don't even hit the ground because of the waiting hens.) They've used Surround, a spray made from kaolin clay, but since getting the birds, they haven't needed it. They've also distributed beneficial nematodes into the soil to kill grubs.

They amend their soil with worm castings, mycorrhizal fungi, and processed chicken litter. Instead of using herbicide to kill the grass at the base of the vines, they dig weeds and use mulch; growing organically involves a lot of manual labor. They hire helpers from their "alma mater," the Viticulture Program at Surry Community College, but stay involved full-time to make sure things are being done right. They also have their own bees, inspired by their new blueberry orchard. They've been toying with the idea of biodynamic certification, since they already follow many biodynamic practices, but are unsure if it is worth going through the trouble. People ask if it is hard to be certified organic, to which Pat responds, "If you are sincere in your practices and you keep good records, it's not hard to get certified." Frequently, visitors want to learn how they do it. "We will drop what we're doing to spend time with them. I just feel it's really important," Pat says. "The human population on this planet needs fresh air, clean water, and good soil, or we won't survive, and as farmers, we have a big part in that whole process. That's what matters."



Like many organic wine makers, the Colwells struggle with the decision to use sulfites. Sulfites are added to wine to make it stable; otherwise it might "re-ferment" and go bad. Many people buy wine and save it for later, and they might not remember that it is sulfite-free if they open the bottle

and it's gone bad. Since Carolina Heritage Winery is still small (about 1500 cases a year), the Colwells aren't ready to take the risks inherent in not using sulfites. They stick to the lower limit (20 to 40ppm; most wines have 80 to 100ppm) and label their



wine “made with organic grapes” instead of “organic.” (Pat also notes that only 1 in 10 million people are allergic to sulfites; many people think they are because they react to red wine, but white wine actually has more sulfites than red wine. A red wine reaction is likely caused by histamines.)

Carolina Heritage Winery’s press is an old apple press on the “crush pad” outside the winery. They press outside to keep the mess out of the winery; the juice is sent down to ferment in 250-gallon tanks. A mistake can mean the loss of a lot of cases of wine, so they are careful in everything they do. In addition to traditional wines like Traminette, they have vats of experiments like mead (wine made with honey), cizer (made with honey and fruit), and cranberry wine, made from a 55-gallon block of frozen cranberry juice that they carted home from Michigan one summer.



Pat and Clyde Colwell have thrown themselves wholeheartedly into their new venture, blazing a path for organic wine-making in our state. They believed it could be done and have proven it, bottling high quality wine from certified organic grapes.

Our staff picked their Traminette as a favorite in a blind taste test. It is the August pick in our Spotlight on NC Wine, and is on sale for \$9.99, \$2 off.



Watch a video of our visit to Carolina Heritage Winery. Visit them online at www.carolinaheritagevineyards.com.

<http://youtu.be/lkgrJcQIVfU>