BALANCING ACT



Winemaker says humidity biggest challenge for growing grapes in Upstate

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George Bursick, director of winemaking for the planned Lake Keowee Winery, spoke at Gignilliat Community Center in Seneca on Tuesday. From the vineyard to the glass, every decision counts in making wine, he said.

WALHALLA — It's all about airflow. That's George Bursick's approach to growing grapes in Oconee County.

As the director of winemaking for the planned Lake Keowee Winery, Bursick is well aware of the challenge he faces. But it's a challenge he's prepared to handle.

The winery will feature 40 acres of grape vineyards. The soil is porous decomposed granite, the slope is sunny southwestern and the water is in plentiful supply — all advantageous factors for growing grapes. However, the humidity is less than ideal.

"We're approaching this project knowing that working with humidity will be a paramount issue," Bursick said. "I'm working with a brilliant civil engineer, and we're analyzing air

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ACT: Bursick is director of winemaking for planned Lake Keowee Winery

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patterns off the lake. We'll plant the vineyards based on these patterns to move the humidity out of the vineyards with natural airflow."

He's also considering using large circular fans, typically used to reduce the effects of frost, to propel air through the vineyards. And with nearly 40 years of experience in winemaking, Bursick has a few other tricks up his sleeve.

Even the design of the trellis affects the end result of the wine, so he'll use different trellising techniques to prevent any blockages of air movement.

But the most important decision is one of the very first — which grapes to grow.

Although he's awaiting research from Appalachian State University to determine the best varieties, he's already thinking about which grapes will do well.

"I tend to think what would do best here are thick-skinned varieties and scraggly clusters. So for red wines, that would mean Cabernet and Cabernet Franc, where the berries aren't touching each other and a lot of air flows through the clusters," he said. "And their skins are like leather, which is what you want because thick skins are resilient to moisture and rot."

He said Pinot Noir and Zinfandels are tightly compacted and very thin-skinned, so they would quickly disintegrate in the Upstate's climate.

Every good wine begins in the vineyard. In Bursick's work with wineries such as J Vineyards and Ferrari-Carano in California, he's seen the winemaking process through from the planting and harvesting to the fermentation and bottling.

Harvest time depends upon the maturity level, sugar level and color intensity of the grapes, according to Bursick, and often it's best to harvest at nighttime.

"For white wine, we pick at night, or in this case if we can't pick at night, we'll chill the fruit down in refrigerated areas," he said. "There's a lot of bitterness flavors inside the skins, and those come out in warmer temperatures."

So if the fruit is squeezed after it's been chilled, those bitter components stay behind. But if the grapes are squeezed in 95-degree weather, those bitter components will seep into the juice. Bursick said the quality of a wine is determined within the first three weeks after harvest.

Making white wine is fairly simple, he said. Squeeze the juice, clarify it so the bitter sediment sinks to the bottom, then pour the juice off the top into stainless steel tanks or 60-gallon barrels and let it ferment.

Red wines require a little more diligence. Rather than squeezing the juice out, the grapes are crushed to preserve the red skins that give red wine its flavor and color.

"So now you have this big mass of juice, skins and seeds in a tank. You add your yeast and as the carbon dioxide causes the skins to float to the surface you have to keep pushing them down," Bursick said. "That's called 'punching down,' and it takes about 10 days. Then you press it to remove the skins, and you have red wine."

'We have a lot at stake here, so we have to hit a home run.'

George Bursick
Lake Keowee Winery
director of winemaking

With a bachelor's degree in plant physiology and a graduate degree in winemaking from the University of California, Davis, Bursick understands the science behind giving the grapes just what they need to produce the best wine body.

So he approaches growing grapes from a physiological point of view. If he gives the plants tons of water and fertilizer, they're going to produce a lot of leaves but not much fruit.

"The trick is keeping them barely alive to optimize the size and the intensity of the fruit. It's a balancing act," he said. "Here we're working with a well-drained soil and a wonderful slope, it's just going to be a challenge keeping the grapes dry. But we have a lot at stake here, so we have to hit a home run."

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