"I Make Wine out of the Naturals"

Dave Hoefer

By Louis Olsen — Jerome Delhaute

"This is a wine, that's made from dried elder berries."

"I make wine out of the natural, what you can get around here: chokecherries, service berries, whatever. Chokecherries are in season now (September); I know an officer that makes jelly out of 'em, but I haven't found any yet. I can sure show you the steps though."

It took a bit of conversation to talk Dave Hoefer into showing us how to make wine. It was a cool clear Saturday morning in September that we went to his home, a two story house on Yohamanite Street in Steamboat.

"I'll give you the story on how I got started when we get going here. A lot of people that worked with me and for me in Pagosa Springs, while I was assistant ranger down there with the Forest Service, make wine. They go out and pick chokecherries and make chokecherry wine.

"I asked them how to make wine, and they told me, 'Ya add these things together, and when it calls for more sugar you add it.' There was this term, 'When it calls for more sugar, add it until it doesn't call for it any more.'

"I would let them come over to taste my wine and ask them if it needed more sugar added or not, they just knew. I couldn't understand how they could tell when it was calling. I couldn't figure it out.

"Well, I made some, and the first batch turned out pretty good, really pretty good. I didn't know anything about sterilizing bottles or anything like that, at that time. I made five gallons again later, and I got a real sort of thin scum on top of this five gallon vat. It didn't taste any good, so I threw it all away. I couldn't hear it calling, so I never had good luck. I had a couple of failures that way, then I found how to do it a little more scientifically. I went to training session (1963), and this fellow was talking about making wine. I didn't know there were books or anything on some of this stuff. I heard about it, so I read some.

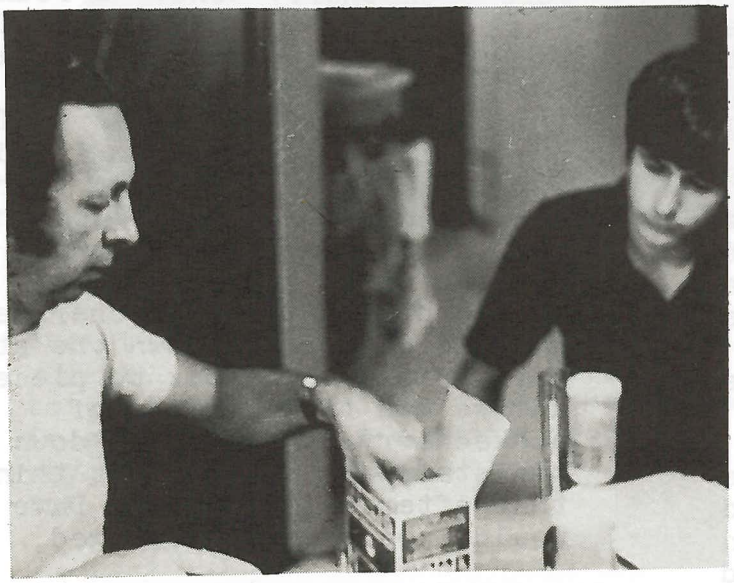
"I tried once again to make more chokecherry wine. I found you have to keep it warm, so I put it on top of this little gas heater, one with just a pilot light. To keep it up there, I had a stick holding it. I had a daughter that was about four then, and she wanted to see what was in it. Well, she looked, and the crock and everything tipped over. The chokecherries and all went right down the stairway. Broke the crock to pieces, and we had five gallons of chokecherry wine running down the stairway." You might think that after a few mishaps Dave would have been discouraged,

but luckily for Dave and for us he was determined to learn.

"Then once while at a fellow's house I saw a book on how to make wine, Successful Winemaking at Home. This book was just sitting in his bookcase. It's pretty technical, you see, everything is written in British measurements which you have to convert to American measurements. The British gallon is 160 ounces, while the American gallon is 128 ounces, so when I first used this book, I didn't realize this. So the wine came out much too sweet, not enough water. In reading the book I found out about a place called 'Wine Art', P. O. Box such and such, Vancouver, Canada. So I wrote them and got a catalog for wine supplies."

"I used to order out of Vancouver, and that is kind of complex because you have duty to pay and rates of exchange are different. They moved from Vancouver and opened a shore in San Francisco and then in Denver. It's much easier to get wine supplies now, there are a lot of new outfits in Denver and around where you can buy supplies."

After finding the secret of where to buy wine supplies, Dave goes on to tell just what wine supplies he does buy, "A lot of the wine I make, I make out of cancentrates. These are grapes from California that are packaged for wine making. Concentrates are pretty expensive stuff, so you have to be good and know what you're doing. Like chokecherry, if you ruin it, all you've lost is your sugar and your labor. When you buy a concentrate, you get a recipe with it. It tells you what to do, the specific gravity, and the level it should be."



"These are concentrates of the grape."

After a trip into a different room Dave came back with an old wooden chest that contained all the tools and ingredients used by the wine maker.

"When making wine, you use an open vessel or waste basket with a lid that is unsealed. This is called primary fermentation or aerobic fermentation. Then you siphon it out into glass jars, jugs, or barrels. This seals it so that no air can get to it. It then goes into aerobic action, where the yeast has to look for some other source of oxygen to stay alive. It gets it from the sugar and converts it to alcohol and carbon dioxide is let off. This really bubbles like boiling water. In this aerobic stage is where it really starts making wine.

"After primary fermentation you start the secondary fermentation process by siphoning the wine into jugs and putting on fermentation locks. Fermentation locks are important for keeping the wine clean and sterile. They let the air out, but it can't get back in. When the air is bubbling out, you know it is fermenting. The lock keeps air and bugs out. There is a fly you have to watch out for, it's called the vinegar fly, is attracted to the scent the wine makes. This fly carries a bacteria that changes wine to vinegar. Once in Pagosa Springs the vinegar fly made a clear scum on the top of the wine. It makes something called 'flower of vinegar' on the wine."

When secondary fermentation is over the wine is ready to be siphoned into bottles, corked and stored. The wine that Mr. Hoefer bottled for us aged in secondary fermentation for about four months but it can stay in secondary

"The fact that it's in a big or small bottle, doesn't matter. It can stay in big bottles like this forever."

"This pear wine I made was no good, but it got better with age."

fermentation and age for as long as desired.

"In siphoning you must fill it to the neck so the wine will not get oxidized. This will ruin the wine. Normally you store it upright the first day, then you store it on its side so that the cork will stay wet and swelled out and so no air will get in. You can run the bottles through the dishwasher or used sulphur tablets to sterilize them. Also there should be no sediment on the botton, maybe some, but when you have too much, then you must siphon it off again.

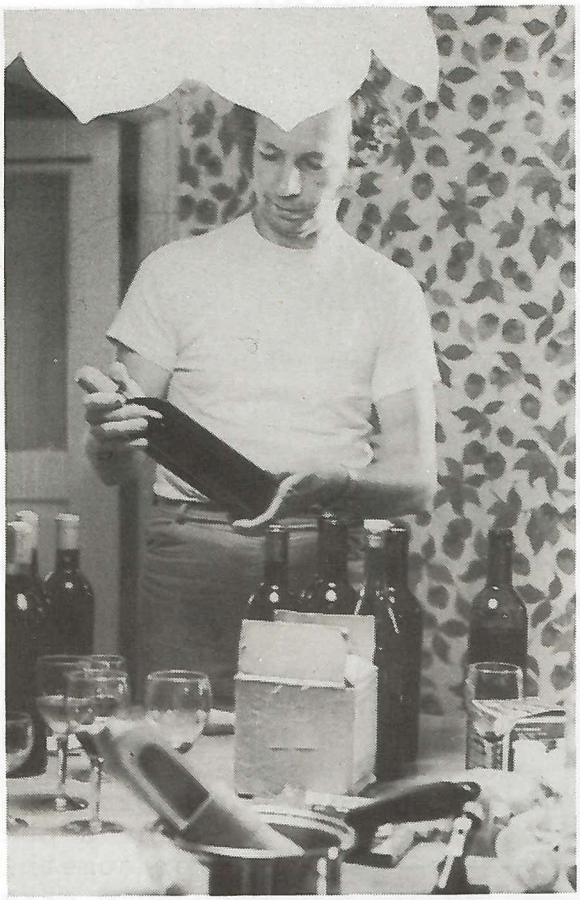
"The corker squeezes the cork into the bottle. It is a very ancient process. My father had a corker just like mine. "

As a finishing touch, Dave adds a capsule, "This is a little cap that slides over the top of the bottle. These caps are moist, and as they dry they seal the bottle as they shrink."

When Dave finished explaining the initial steps he started into the complicated methods and reasons involved in the process, "it gets more complex unless you know your chemical formulas."

Even though technical, he went on to explain, "A lot of wines take different things like California red grape. Beside the grape itself, you need an acid blend. You have to balance the acid of the wine. Everything is either acetic or basic. You can titrate this by using a phenolthalein solution or something like it. So much acid makes the solution change color. By taking a certain amount of wine and adding so many drops of a certain chemical, you can tell what the acid content of the wine is. Then by adding an acid blend, which is little crystals of citric, tartaric and malic acid, these fill the acid content of the wine. You have to have a certain acid content to make it taste good. Then you have to have what's called a campden tablet which is a chemical formula called metabisulfite.

"Sulphur dioxide cleans up the bacteria or yeast that is naturally in wine. You add one of these tablets to your wine, and it kills the bacteria and yeast in it. Like a grape wine has yeast attached to the grape. You've seen grapes with that white color to them, well, that is what makes the wine. Just so that there is enough good yeast to overcome the bad yeast. It's like planting a yard, you always have weed seed in with the grass seed, but so long as you have enough good grass seed, the weeds will come up, but they will get



"Here are some red seals that seal the wine, and make it look better."

taken over and killed out.

"If you're not making it right from the grape, you have to kill off all the yeast that might be in it. That is what these tablets are for. You've heard of raisins that are treated with sulphur dioxide, it sterilizes the raisins, that's what this does. It's a compound of sulphur made to sterilize things. You can use chlorine too like bleach to sterilize. Only it's harder to rinse off. If you have any luck, it will work. These campden tablets go off in the air as sulphur dioxide.

"Certain wines you ferment at certain levels to get them dry. Then you add sugar to sweeten them. When you do that it starts to ferment again, so you add some sorbic acid and it stops the fermentation. Yeast uses an enzyme to take regular sugar and make it into invert sugar. Invert sugar makes a good wine. There is corn, beet and cane sugar. By boiling cane sugar to a certain temperature level and adding citric acid, it will invert it and change its chemistery.

"Then you add a packet of yeast. There are special wine yeasts made to take the fermentation process and the higher alcohol content. Any yeast will die when you get to 18% alcohol by volume. Beer yeast is even less than that, they just can't survive. Baker's yeast, like for baking bread, it takes maybe 10% of that before it dies. You also need a certain temperature, if it's too hot or too cold it dies. So much water and sugar makes a potential for so much alcohol by volume. Wine is made for two thin

"Wine is made for two things, for alcohol for taste. A good wine has a high alcohol content. If not it will spoil. The alcohol

"This wine has about 13% alcohol, and should be about 15%."

preserves the wine. I usually start out at a specific gravity (1.110) for about 14-15% potential alcohol content. As it ferments the specific gravity goes down because the alcohol is less dense than water. We've tested this (elderberry) on the hydrometer to find when to shift from primary to secondary. 1.030 is the time to shift it. .989 is dry, there is hardly any sugar in the wine.

"The hydrometer tells us the specific gravity of the wine

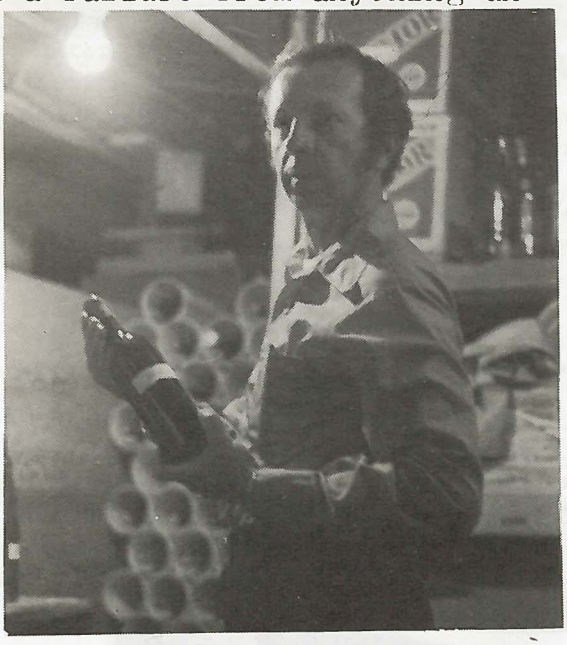
or water or anything. They even used them to test the water in your car battery to see if it's good or not. It shows how dense the water is. The hydrometer measures water at 1.000 gravity, warm water is a little less dense. Kool aid with sugar in it is really dense. You can put yeast in Kool aid and ferment it into alcohol.

"Pectin is a natural substance in fruit that makes a jell. When you make a wine with the fruit in it creates an enzyme which in a sense eats up the pectin. This works to make a clear instead of cloudy wine. It can be cleared with other chemicals, but that is a real hassle.

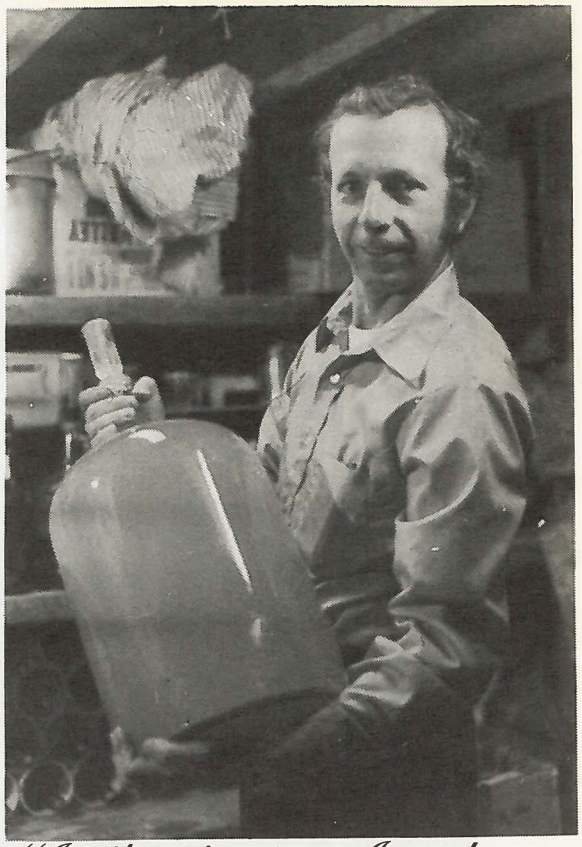
"Tannon makes different flavors, natural grape wines have tannon. Teas that are too strong and bitter and stick to the roof of your mouth has tannon in them. You have to have this in your wine to give it a certain taste, 1/8 to 1/4 teaspoon of it to a gallon."

When Dave finished explaining the substances and complex procedures involved, he then went on to list a few facts, "You can spoil a wine so easy if you don't keep it clean. I don't soak it in a solution for eight hours like some books say, I don't go to that extreme. I never have had a failure from anything unsanitary. The approximate alcohol in wine is 12-17%, this depends on the chance of making it sweet or dry. You can get a higher alcohol content if you start at a high sugar density. If a sweet wine is desired, you can add a wine conditioner which is added for taste when bottling.

"Some people like dry wines, like some people like sugar in their coffee and some don't. You have to develop a taste for wine. A dry wine is better in the long run, once you build up a taste for it."

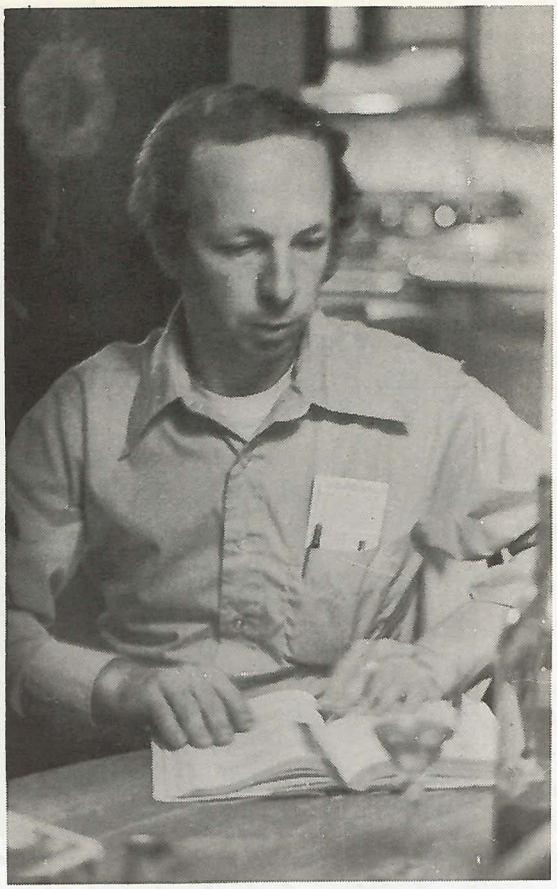


"My oldest bottle is about '72 or '73."



"In these two jugs, I made 25 bottles of rhubarb."

This is how it looked when we left.

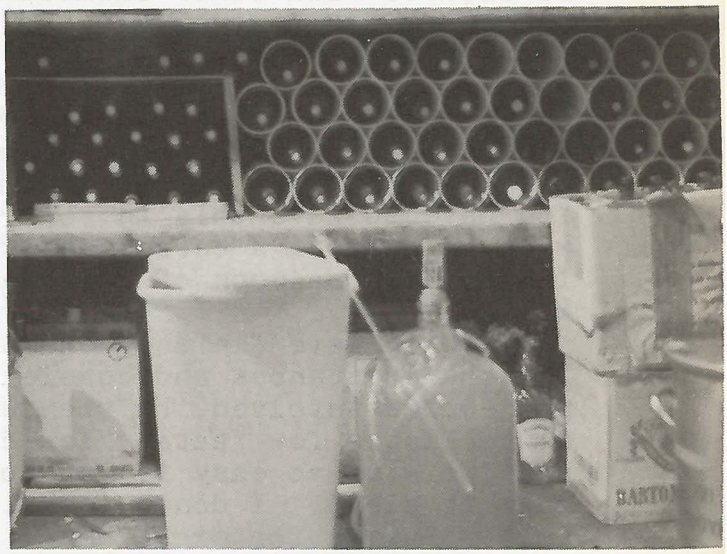


Chokecherry Wine

2-3 pounds of chokecherries
2½ pounds of sugar
1 gallon of water
1 campden tablet
1 teaspoon of yeast nutrient
½ teaspoon of pectic enzyme powder
1 teaspoon of acid blend
1 packet of wine yeast

That was all. As we were about to leave, we thanked Dave for his time and he stated laughingly,

"THAT'S HOW IT WORKS!"



Dave gave us the following recipe that he uses for his chokecherry wine.

"The corker squeezes the cork into the bottle."

This is just part of Dave's wine cellar.

A toast between Dave and my co-author before we left.