

For vintner Bernhard Werner, the hardest part is the weeks leading up to the grape harvest. Night after night, he must slip from his warm bed to brave the frigid winter air to check the temperature in the vineyards. The harvest can only take place when the grapes are frozen solid and the temperature well below freezing. One extended warm spell and the game is up: no wine can be made. It is a gamble, says Werner, but also a gift. If the weather cooperates, he can make one of the most rare and extraordinary wines in the world: Eiswein.

Eiswein ("ice wine") is a dessert wine made from frozen grapes. The grapes are hand-picked before sunrise in sub-zero temperatures after being left on the vine for months longer than the regular harvest. Because the grapes are pressed while still frozen, the water crystals in the grapes' skins are easily separated from the juices and sugars, creating an unusually sweet and intense grape must. The concentrated flavor is maintained throughout fermentation, and the resulting wine has a perfect balance between honey-like sweetness and acidity.

Unlike the pale gold nectar of the wine itself, the origins of Eiswein are cloudy. Many historians hold that Eis-

wein was first made in the German region of Franconia in 1794. A hard frost swept across the land unexpectedly early that year, freezing the maturing grapes on the vines. A desperate vintner attempted to salvage the harvest by pressing the frozen grapes and found the resulting wine to be exceptional. Other accounts trace Eiswein's genesis to Würzburg in 1835 and the vineyards of Traben-Trarbach in 1842.

Whatever the actual birth date, the wine's accidental discovery did not immediately kickoff a new winemaking trend. For the next one hundred fifty years, Eiswein was made only when the weather allowed and exclusively for the pleasure of the vintner. Because the wine's creation depended so wholly on the vagaries of the temperature, no one thought it could be produced consistently or profitably. That changed in the mid-1960s when Dr. Hans

Georg Ambrosi, former director of the Staatsweingüter, a large state-run wine estate in the Rheingau, began to experiment with ways to systematically produce Eiswein.

Dr. Ambrosi left as little to chance as possible. He designated low-lying parts in the vineyard, areas most likely to receive a hard frost, for the Eiswein



## RISKY BUSINESS: Making Eiswein in Germany

Vintners play a game with Mother Nature and when they win, the prize is a rare, honey-sweet gift from the vineyard. BY BARBARA D. DIGGS







grapes. He also created a system of draping plastic nets over the grapes in tunnel-form to protect the grapes from animal scavengers and heavy rains. These techniques, among others, earned Dr. Ambrosi the title of “father of Eiswein” among his peers, for they showed how Eiswein could be produced commercially. Soon, German winemakers grew eager to try their hand at Eiswein, and, by the late 1970s, having Eiswein on one’s wine list had become a sign of prestige. However, despite these methods and other advances in Eiswein production, one still never knows whether Eiswein can be made in a given year.

“Some years there is nothing,” Bernhard Werner says simply. Werner has been producing Eiswein at Werner & Sohn, his family’s three hundred sixty-year old winery in the Mosel, since 1988. It is not just warm temperatures that can kill an Eiswein harvest. The grapes for Eiswein, typically Riesling grapes in Germany, are usually harvested in mid-to-late December. This means they hang on the vine as long as ten weeks after the regular harvest. During this time, the grapes are agonizingly vulnerable to devastation by storms, rot, or wild animals.

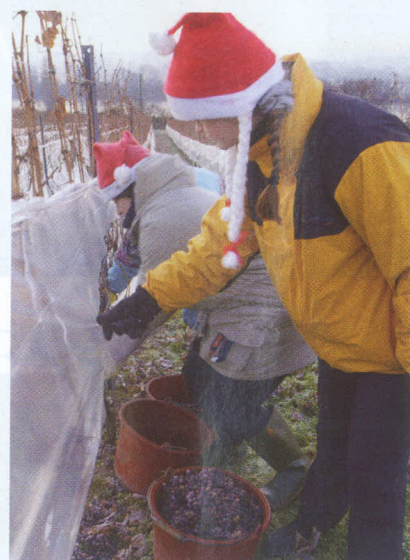
Like most winemakers, Werner tries to protect the grapes by putting nets over them and hanging bars of soap among the vines to mask their scent. He even collects human hair clippings from the local barber shop and

**Top:** When the frozen grapes are pressed, the water crystals are separated from the juices and sugars, intensifying the flavor. Courtesy Deutsches Weininstitut. **Center:** Covering the grapes with plastic helps protect the valuable harvest from heavy rains and animals. Courtesy Deutsches Weininstitut. **Bottom:** The frozen grapes for the Eiswein may remain on the vines for as long as ten weeks after the regular harvest. Courtesy Deutsches Weininstitut.





**Top left:** Making Eiswein is a juggling act where the vintner must coordinate available labor for picking and production with nature. Courtesy Deutsches Weininstitut. **Top right:** The practice of using plastic for protection was developed by the "Father of Eiswein" Dr. Hans Georg Ambrosi. Courtesy Deutsches Weininstitut. **Lower right:** Unwritten rules dictate that for German wine to earn the "Eiswein" label, the grapes must freeze naturally on the vine at 19.4°F or lower. Courtesy Deutsches Weininstitut. **Lower left:** Eiswein production may be in jeopardy as global temperatures are on the rise. Courtesy Deutsches Weininstitut.



scatters the hair around the vines, hoping the odor will scare away wild boars. However, these safeguards are not always enough. Protections notwithstanding, one year boars managed to eat every single grape from his Eiswein vineyard. "It was like there had been a vacuum," he says. "There was absolutely nothing left."

German tradition makes producing Eiswein a challenge as well. A long-held unwritten rule dictates that wine may earn the "Eiswein" label only if the grapes freeze on the vine naturally at a temperature of -7 degrees Celsius (19.4 Fahrenheit) or lower. This tenet sets German Eiswein apart from the many other "ice wine"-producing countries, such as the United States, and Australia, that permit their grapes to be subjected to artificial freezing.

In addition, by law the grapes must also have a minimum concentration of sugar, measured at 110 to 128 degrees Oechsle. Because cold temperatures cause the sugar

inside the grape to become more concentrated, vintners seek to harvest the grapes at the coldest temperatures practicable. Maddeningly, if temperatures fall too low, the grapes become hard as steel and impossible to press. Making Eiswein is unquestionably a complicated balance of science, law, tradition, and luck.

So why do it? Image is part of it. Being able to make a good Eiswein shows your versatility as a winemaker. "Producing an Eiswein is like putting the dot on the 'i' of a given vintage," explains Dirk Richter of Weingut Max Ferdinand Richter, whose winery has produced Eiswein almost every year since 1961.

However, there is something else too. Vintners like Werner and Richter clearly get a kick from culling something sweet and pure from Mother Nature's most unforgiving conditions. "It is a special thing...an adventure," Werner says. Friends and neighbors evidently agree. They



## TAKING THE ICE WINE RISK IN THE UNITED STATES

You do not have to cross the ocean to have traditional German Eiswein. Although the United States permits ice wine to be made with grapes artificially frozen after the harvest, some United States vintners insist on making it the old-school way, with grapes frozen on the vine. Mazza Vineyards, a Pennsylvania winery near Lake Erie; Sheldrake Point Winery in Ovid, New York; and Chateau Chantal, a B&B and winery in northern Michigan, are among the ice wine purists. At Chateau Chantal, guests can even participate in the ice wine harvest. "However," winemaker Mark Johnson admits, "at ice wine temperatures, most don't stay outside for more than a couple of minutes."

For more information on Chateau Chantal, visit the website: [www.chateauchantal.com](http://www.chateauchantal.com).

*Chateau Chantal in Michigan is one of a select few wineries in the United States to produce Eiswein in the traditional manner. Courtesy Chateau Chantal.*



frequently volunteer to help with harvest—even though it means waking before dawn, and being in glacial temperatures for two to three hours while snatching stone-like grapes off the vines as fast as their frozen fingers can manage.

With all the labor that goes into producing Eiswein, there is little wonder why its price is so high. At Werner & Sohn, a half-bottle of Eiswein (375mL) costs between 18 and 50 Euros, depending on the sweetness and quality. Moreover, the price reflects the wine's rarity. Both Werner and Richter's wineries produce only five hundred to one thousand half-bottles of Eiswein annually—compared to some fifty thousand full bottles of standard wine.

Recently, global warming has brought into question the future of German Eiswein. Germany is not like Canada (currently the largest producer of ice wine) where a hard frost every year is virtually guaranteed. Ernst Büscher of

the Deutsches Weininstitut reports that in Germany: "the number of nights with temperature minus 7 Celsius or lower is decreasing. In 2007 and 2008 [there was] just one or two nights with these low temperatures. In 2006 almost no Eiswein at all could be harvested, because the temperatures had not been low enough and the grapes had started to rot dramatically." Werner, too, is concerned, noting that his Eiswein harvest is getting later and later every year.

In the meantime, drink up. Eiswein is traditionally served with desserts or as a complement to strong-tasting foods such as foie gras or Roquefort cheese. However, Richter thinks that Eiswein does not need any particular food to be enjoyed. According to him, the elegance, sweetness, and scarcity of this wine make it the ideal drink for special occasions, such as weddings or birthdays. "Serve it after a speech or toast," he urges. "Everyone will say that it was the best speech ever made." **GL**