Home Winemaking

DUMIES

Learn to:

- Master every step of the winemaking process
- Select the perfect grapes for your wines
- Craft a delicious range of red and white varietals
- Create sparkling, rosé, and dessert wines

Tim Patterson

Writer for Wines & Vines and WineMaker and award-winning home winemaker



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Praise for Home Winemaking For Dummies

"A thorough, practical, and entertaining guide, this text takes tips from the pros and brings common sense and approachability to the art of winemaking. Mr. Patterson's vast experience and contagious passion for the subject make Home Winemaking For Dummies an enjoyable read while the format makes it an excellent reference and allows the reader to delve as deep into the subject matter as he or she wishes. Whether problem-solving or pursuing stylistic ideals, Mr. Patterson holds the reader's hand when needed but still encourages creativity within safe boundaries. From sourcing fruit to healthy fermentation habits straight through aging, bottling, and even enjoying home-made wine, this guide has you covered at every step — I even learned a few things myself! This book would be a welcome addition to any wine enthusiast's library and is equally accessible to novice and connoisseur.

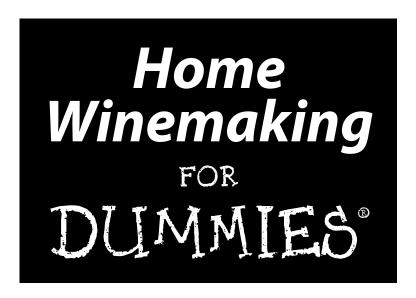
- Ondine Chattan, Winemaker, Geyser Peak Winery

"As a 20-year amateur winemaker with an addiction to winemaking books, I now have a new 'go-to' book for my first reference! After the excellently accurate coverage of basic winemaking, Tim's tome takes the wonderful turn of emphasizing the subtle, and not-so subtle, differences that make the distinctions between the popular varietals — all in one place! Home Winemaking For Dummies is now prominently on my shelf in front of all the textbooks!"

— Dave Lustig, President, Cellarmasters Home Wine Club Los Angeles

"Tim Patterson is able to express his knowledge and passion of winemaking in a very understandable, humorous, and practical way. If you follow the advice in this book, you will be able to produce wine that will likely be better than inexpensive commercial wine, and could be as good as any wine ever made. I applaud Tim's effort and wish this book was around when I started making wine."

— Kent Rosenblum, Consultant Winemaker, Rosenblum Cellars, and former home winemaker



by Tim Patterson



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About the Author

Tim Patterson writes about adult beverages and makes some of his own in Berkeley, California. In previous lives, he wrote about national politics, television, techie stuff, and hillbilly music. He roots for glamour-free wine regions and low-profile grapes; wants to know how wine is really made; and bottles his own in his garage, just to keep himself honest.

He does the monthly "Inquiring Winemaker" column for the industry trade magazine *Wines & Vines*, digging into winemaking theories and techniques, and writes frequently for consumers in the *Wine Enthusiast*. More to the immediate point, he has expounded regularly about home winemaking for several years in the pages of *WineMaker*. Past prose has also surfaced in *Diablo*, the *Livermore Independent, Central Coast Adventures, Vineyard & Winery Management, Sommelier Journal*, and *The Vine*, and on various now-defunct Web sites.

He coauthored (with Jim Concannon) *Concannon: The First One Hundred and Twenty-Five Years*, a history of that venerable Livermore Valley winery; contributed an introduction on the history of world dessert wine styles to Mary Cech and Jennie Schacht's *The Wine Lover's Dessert Cookbook* and a true-life tale to Thom Elkjer's *Adventures In Wine*. He contributed to *Opus Vino*, a global wine encyclopedia. With veteran California winemaker and wine educator John Buechsenstein, he's working on a book about the science — and often the lack of it — behind the wine world's most fascinating concept, *terroir*. And of course, there's a blog: Blind Muscat's Cellarbook (http://blindmuscat.typepad.com).

His made his first home wine in 1997 — a small batch of Carignane, hardly the noblest of grapes — and when it turned out to bear a striking resemblance to real wine, he was hooked. Since then he has collected a small wall full of ribbons from amateur wine competitions and recruited a circle of friends to do most of the hard work. He leans toward Rhône reds and aromatic whites, but he's willing to try anything that grows on a vine.

Dedication

For my brother Byron, who taught me that normal humans could make good wine at home — and that he could, too — as well as so many other things.

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When the opportunity to write this book materialized, I was one happy winemaker. For that I have a string of folks at John Wiley & Sons to thank. First and foremost, Acquisitions Editor Robert Hickey made the early stages close to painless. From start to finish, he was enthusiastic, supportive, helpful, and prompt, all at a distance of several thousand miles. Likewise, working with my Project Editor, Kathleen Dobie, was a delight: just enough guidance to keep me on track, just enough humor to make hearing from her a pleasure. Despite all the warnings that print is dead, the entire crew at Wiley makes me believe the medium is very much alive.

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This book draws on interviews and conversations about winemaking for articles I've written, so thanks to my editors and publishers at *Wines & Vines* (Chet Klingensmith, Tina Caputo, and now Jim Gordon) and at *WineMaker* (Kathleen Ring, Brad Ring, Chris Colby) for paying me to learn how to be a better winemaker. For the details on doing this in your garage, the crew at the Oak Barrel in Berkeley — Bernie Rooney, Homer Smith, Kel Owen-Alcala, and Bob Lower — have been invaluable and generous beyond belief. Thanks to Peter Brehm for educating me about grapes.

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The book is dedicated to my brother Byron, who showed me the ropes of home winemaking. But heartfelt thanks also go to my wife, Nancy Freeman, who graciously allowed this runaway hobby to take over our house and a good deal of our social life, resulting in this book.

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Introduction

ntil you've done it, making your own wine at home seems like an impossible challenge. Don't you need endless rolling hills covered with vineyards; hundreds of thousands of dollars worth of stainless steel tanks; row upon row of French oak barrels; a huge, temperature- and humidity-controlled facility; and a Ph.D. in enology from the University of Somewhere Famous?

Nope.

One day, when my stepson Diego was about eight years old, my wife, Nancy, announced she was going to make jam from the plums hanging off the tree in our backyard. "Mom," he said, "you can't make jam; you have to buy it at the store!" Nancy smiled, shook her head, and went to work with some pots and a strainer and a big kettle for sterilizing the lids and jars. And sure enough, in a couple of hours, we had jars of jam cooling on the counter and one awestruck kid. (For the record, the kid has gone on to do things that seem hopelessly impossible to me, like building entire hospitals from scratch.)

Home winemaking works the same way as jam — except that it takes longer. Like baking bread or knitting a sweater, making wine takes simple materials and produces amazing results. If millions of people — that's a conservative estimate — all over the world have made good, drinkable wine for nearly 8,000 years, you can do it, too.

My older brother Byron was the first in our family to try his hand at the ancient craft of winemaking. He liked to drink wine, and he thought he could save some money and maybe even get a tax break by planting a few rows of vines on a piece of scraggly land he owned up in the foothills of California's Sierra Nevada mountains. I tried his wine and, by golly, it tasted like wine! I figured that if my brother could do this, so could I, and when I made my first tiny little batch of Carignane, I had my own plum jam experience: It tasted like wine!

Since then, I've gotten in way over my head trying one grape after another, and I've made a few bucks writing about winemaking. I'm lucky to live in Northern California, near hundreds of thousands of acres of prime grapes and a vast storehouse of winemaking knowledge. But in the 21st century, with the advantage of the Internet and modern transportation — and, of course, this book — you can make great wine anywhere and everywhere.

About This Book

Whether you're just dipping your toe into the world of winemaking or you've made many batches already, this book has something for you. First of all, it's a basic how-to and reference guide for first-time home winemakers. I cover all the necessary steps and procedures in detail. With this book, some grapes, and minimal equipment, you can make good wine — a few gallons or an entire barrel — in a spacious dedicated garage winery or in the corner of an apartment kitchen.

Other home winemaking books on the market cover the same ground and are chock full of good advice. But what's different about this book is that it goes on to offer information and opinions about different grape varieties — which need very different treatment — and advanced winemaking techniques. No one, professional or amateur, simply makes generic red wine; people make Cabernet or Pinot Noir or Tempranillo or Chambourcin, and they don't all do things the same way.

In a dozen years of garage winemaking, I've worked with a lot of grapes, made some nifty wines, won a bunch of medals, and made my share of mistakes. Along with my firsthand experience, my day job is writing about commercial winemaking trends and topics. I spend hours every week talking to winemakers about how they handle different grapes, how they choose yeast strains, whether temperature matters, what they think of filtration, how they fix problems, and on and on. So this book passes on that expert information so you can use it in your home winery. Sure, home winemaking is a hobby, but why not pursue it like a pro?

I hope that these various tricks, tips, and insights from the world of commercial winemaking make this book useful for experienced home winemakers as well as beginners. And if you simply want to understand how wine is made — whether you intend to get your hands dirty or not — this book answers your questions. Where do all the unpronounceable grapes come from? What the heck is *malolactic fermentation*? Why does Chardonnay taste so different from Riesling?

Conventions Used in This Book

The *For Dummies* series uses the following conventions to make information easy to understand:

- ✓ All Web addresses appear in monofont.
- ✓ New terms appear in *italics* and are followed closely by an easy-to-understand definition or explanation.
- **▶ Bold** text highlights the action parts of numbered steps.

In addition, this particular book follows a few of its own conventions:

- ✓ All temperatures, weights, areas, and volumes are first given in standard U.S. measurements (Fahrenheit, pounds, acres, gallons), followed by the (rough) metric equivalents (Celsius, kilograms, hectares, and liters) in parentheses. However, some measurements are always done in metric (such as grams per liter of acid), and these appear in metric only. I use the abbreviations F, C (Fahrenheit, Celsius) throughout, as well as °—the degrees symbol.
- ✓ The U.S. dollar (USD) may not be the strongest currency in the world, but it's the currency I use when estimating costs.
- ✓ For simplicity and clarity, all grape variety names and wine varietal names are capitalized: Pinot Noir grapes make Pinot Noir wine.

And, lest you think I'm trying to be too cool for school, I use the term *homies* to mean you, me, and everyone else who ferments wine at home.

What You're Not to Read

This book aims to be a comprehensive reference, which is no doubt more than you need to make your first batch of wine or to explore a specific grape or technique. If you're of a mind to prioritize, you can skip the following without damaging your wine:

- ✓ Text in sidebars: The sidebars throughout the book offer background information, forays into related topics, and tips from winemakers who have a handle on whatever topic the chapter addresses. Depending on how you're using the book, they may be entertaining, enlightening, or both, but they aren't essential.
- ✓ Technical Stuff icons: In a few places, the text contains detailed technical or scientific background and explanations. This information helps with the why of certain points, but isn't part of the how to.

Foolish Assumptions

Here's what I assume about you, dear reader, including some things you should assume about yourself going into this winemaking business:

- ✓ You like to drink wine.
- ✓ You're considering making some of your own, or at least want to know how the same way you picked up a copy of *Home Brain Surgery For Dummies* just to check it out.

- ✓ If the potential payoff is good enough great, inexpensive wine you're willing to do some manual labor, work through numerous third-grade math problems, and learn a teensy bit of chemistry (yikes!).
- ✓ You have more patience than the folks who brew beer at home. No offense, beer people, but wine does take a lot longer from start to finish.
- ✓ You have a number of friends who like to drink wine because you will surely end up with more wine than you can reasonably drink on your own.

How This Book Is Organized

The book comes in seven parts, with 23 chapters and 4 appendixes tucked into those parts. Many topics show up more than once — a first time to explain a particular procedure or describe a certain winemaking direction, and a second time with more detail, multiple variations, or a caveat about the exception that proves the rule. If you're looking for a specific topic, the Table of Contents and the Index are the best ways to find everything relevant.

Part 1: Motivation, Materials, and Methods

In which Your Author dissects the various reasons why people take up home winemaking; lays out the basic steps; surveys the range of available equipment; counsels on the importance of starting with good grapes; and emphasizes the essential trio of sanitation, temperature control, and oxygen management.

Part 11: Phases and Stages

In which Your Author takes you and your grapes on the journey from harvest to bottle, pausing for consideration of destemming, crushing, adjusting wine chemistry, fermenting, pressing, racking, aging, fining, filtering, blending, bottling, and troubleshooting, not to mention the mysterious malolactic. I finish off with a chapter on storing, aging, and tasting your wines. This part more or less corresponds to standard books on home winemaking.

Part III: Deeper Into Reds

In which Your Author surveys a number of techniques commercial wineries use in fine red wine production, most of which can be adapted for home winemaking, and then mixes and matches these techniques with information

about noteworthy red grape varieties. Suggestions are included for what might work where and what the impact on your wine might be — with a lot of commentary by professional winemakers.

Part IV: Deeper Into Whites

In which Your Author follows the same approach as Part III on reds. This part includes a survey of advanced, optional white winemaking techniques, and a closer look at a broad range of popular white grape varieties, the wine styles they work best in, and how to get your grapes from here to there.

Part V: Beyond Red and White

In which Your Author explains the whys, wherefores, and special joys of pink wine, takes a look at dessert wine styles — late harvest and fortified — and sketches out ways to put a little sparkle into your wine.

Part VI: The Part of Tens

A *For Dummies* standard, this part contains helpful lists: home winemaking mistakes to avoid, ways to save money, and the eternal tension between wine people and beer people — in society at large as well as in your garage.

Part VII: Appendixes

A set of appendixes follows the main parts: a glossary of winemaking terms; a listing of resources for obtaining grapes, equipment, supplies, and information; conversion tables; and detailed information and formulas for using sulfur dioxide and calibrating usage with wine pH.

Icons Used in This Book

In the *For Dummies* tradition, some sections are highlighted with *icons* — amusing (I hope) little images in the margin — to draw your attention to certain kinds of information.



This icon flags the most important points in a particular section, information that has a big bearing on the topic.



I use this icon to point out "insider" information, such as things I learned the hard way, or neat little tricks that aren't obvious, or pointers from the world of commercial winemaking.



A paragraph or section tagged with this icon delves deeper into more geeky, scientific detail or background that isn't necessary for immediate winemaking tasks.



Watch out for the warning icon, which I use to indicate places where following (or not following) a certain procedure could be hazardous to your wine, or even your health.



When you see this icon, you know you're getting advice and insights — some technical, some philosophical — from commercial winemakers across North America.

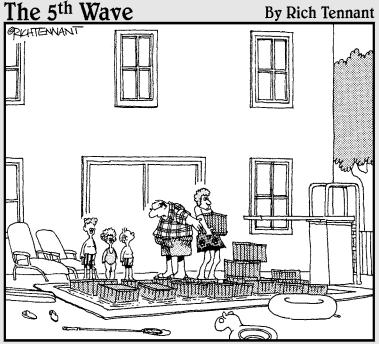
Where to Go from Here

Where to start and how to use this book depend on what you're after:

- ✓ If you're a first-timer wanting to get The Big Picture or trying to decide whether to do this at all head for Chapter 1 to get the lay of the land.
- ✓ When you're ready to take the leap and make some wine, skim through the phases and stages of Part II to find out what you'll be doing in the next few months, and then come back to specific chapters as your crush progresses.
- ✓ If you have a pressing winemaking problem to solve right now, check the Table of Contents and the Index.
- ✓ If you already know home winemaking basics and want to try a new grape variety or explore a technique, Parts III and IV offer some inspiration.

I figure that if you've gotten this far, you're hooked, so turn the page and read on!

Part I Motivations, Materials, and Methods



"Look Kids, Mommy and Daddy need a thermostatically controlled environment for their wine until the cellar is finished.

In this part . . .

B efore I have you start making wine at home, I give you a preview of what you're getting into. Anybody with a nose, a mouth, and a decent attention span can make very good wine.

These first chapters give an overview of the whole shebang, rhapsodize about the wonders of good grapes, survey equipment you will need, speculate about the home winemaker mindset, and preach the gospel of safe home winemaking.