

CLIFFORD P. OHMART: *View From the Vineyard: A Practical Guide to Sustainable Winegrape Growing*. Wine Appreciation Guild: San Francisco, 2011, 192 pp., ISBN: 978-1-035879-90-9, \$34.95.

Most winegrowers want to practice sustainable winegrowing but are not aware of any simple definition of sustainability or how to practice it. This book serves to provide the concepts and perspectives needed to address the complex issues associated with sustainable winegrowing. The author, Clifford P. Ohmart, has the background and experience to shed light on this topic perhaps better than anyone else. His career has included three different but related paths that prepared him to address sustainability with a broad perspective. He has a basic science background with a PhD from University of California at Berkeley where he specialized in integrated pest management (IPM) and insect ecology and has published extensively on these topics. He has also worked as a private consultant to growers to develop integrated pest management strategies and as a writer of a bimonthly column on sustainable winegrowing for *Wines and Vines* magazine since 1998. In his third career path he worked with large groups of winegrowers to develop regionally sustainable winegrowing programs. Such work resulted in the *Lodi Winegrowers Workbook* (a self-assessment of sustainable winegrowing practices) and the *Lodi Rules for Sustainable Winegrowing*, a third party certified sustainable winegrowing program.

The book is divided into two broad parts. The first, composed of five chapters, is devoted to defining and understanding sustainable winegrowing. The second, composed of ten chapters, addresses the practice of sustainable winegrowing from a holistic viewpoint. There are over 60 figures that enhance the text and plenty of references for further reading. The book is written in a very approachable style even for those without a background in farming or viticulture. What is particularly refreshing about Dr. Ohmart's approach is that he understands that growing quality winegrapes sustainably is based on sound ecological principles and understanding of ecosystem dynamics. Early on in the book he indicates that the challenges to development of a regional sustainable winegrape growing program are to define it, to implement it and to measure its effects. While there is no simple definition for sustainable winegrowing the one he uses was developed by the California wine industry and is referred to as the "3E's" of sustainability. Stated simply, they are practices which are environmentally sound, socially equitable and economically feasible. Sustainable winegrape growing considers soil building as the foundation, minimizes off-farm inputs and concerns itself with the health of the environment and social equity.

Ohmart points out that farming is not "natural" – farmland is less ecologically diverse than, for example, forested land and farming leaves a definite environmental footprint. He views sustainable winegrowing as a continuum from less sustainable to more sustainable but recognizes that complete sustainability is not possible. He compares organic farming to sustainable farming emphasizing the points in

common such as minimizing soil erosion, keeping water free of contaminants and building soil fertility, but also points out the differences as organic farming uses no synthetic fertilizers or pesticides. No nationwide certification program for sustainable viticulture exists, however there are regional programs. Organic farming and national organic standards have been codified for over a decade. Interestingly, perhaps because these organic standards were developed so long ago, some environmental concerns are largely not addressed by organic standards as they are in most sustainable farming programs. A chapter is devoted to the principles of biodynamic farming and its emphasis on spirituality and natural rhythms. Without prejudice he wisely points out that “there are award winning wines produced by each of the farming paradigms, organic, biodynamic, conventional and sustainable and there are bad wines produced by each of them as well”.

A very interesting chapter is devoted to wine as a commodity and the resulting constraints to sustainable winegrape growing. The dictionary definition of a commodity as an economic term is “an article of trade or commerce that can be transported, especially an agricultural or mining product”. The Wikipedia definition is “a largely homogeneous product traded solely based on price”. In this the author sees the consolidation of wineries worldwide into large conglomerates and concomitant increase on the downward pressure of grape prices as a threat to turn winegrapes into a commodity such as to make sustainable winegrowing impossible in most areas. For those wineries where most sales are local or through their own tasting room and where distribution is not large, the issue of commodification of wine is nonexistent. However, the author points out the need everywhere to resist the identification of wine as a commodity and rather emphasize that wine is a value added product. Winegrowers need to emphasize the uniqueness of the grapes they grow to wineries and consumers. Higher winegrape prices ensure a sustainable business and provide growth and flexibility for the regional wine industry.

For me the most important chapter in the book is chapter 5 regarding the role of science in winegrape growing in the United States. Too often I have attended presentations at so-called “scientific” sessions of grape growers and wine educators where the invited speaker is an organic winegrower who has taken an “us versus them” attitude. He may have made some fine wine but is unaware of the cost to make that wine. The session moderator usually thinks it not sufficiently important to ask the cost yet this is a critical point – it is the economic “E” that drives sustainability. For example, I heard one organic grower-presenter refer to his conventional winegrowing neighbors as “nozzle heads” because of the presenter’s view of such farmers as indiscriminant users of pesticides. This is despite the fact that most winegrowers implement integrated pest management practices which are science-based and data driven and cost effective. Yet, I have never heard an organic grower give information about the economic feasibility of their organic practices. Sample costs for the production of organic winegrapes are available from U.C. Davis and are very high (over \$4,000 per ton to break even at a yield of 4 tons per acre). Often, especially in the East where disease pressure is higher than in California, the real

economics of organic or quasi-organic practices would indicate unsustainable levels of crop loss, low yields or a prolonged time of more than 5 years to harvest of the first crop. Ohmart points out that the foundation of training of farmers, whether conventional or sustainable, organic or biodynamic, should be based on science. One must be objective in gathering data and be aware of science based statistical analyses. To be sustainable one cannot treat winegrape growing or winemaking purely as an art – one must use a scientific approach. Simply put, if you cannot measure it well you cannot manage it well.

People go into winegrowing for a variety of reasons but few have the experience or vision to know what their long-term goals for the vineyard should be. In Part II of this book Ohmart helps the grower develop a vision based on holistic principles of a sustainable vineyard. He warns, borrowing a quote from Yogi Berra, “If you don’t know where you are going, you might wind up someplace else.” He presents a vision for the long-term health, biodiversity and productivity of the farm. He describes the need to identify resources, to develop sustainable goals, shared values and the desired landscape of the future. His considerable experience in developing a holistic vision came from a groundbreaking workshop he had with members of the Lodi Winegrape Commission.

Perhaps the least recognized “E” of sustainability is social equity. The reason for its lack of attention is that it is probably the most challenging to address. Humorously, Ohmart refers to this “E” as the 3<sup>rd</sup> rail of sustainability because no one wants to touch the subject for fear of getting zapped. Ohmart does a good job in defining social equity in terms of its challenges, human resource issues, estate planning and community involvement.

The last several chapters of the book are devoted to principles of ecosystem management and data driven sustainability. A common thread is that of vine balance – keeping vine vigor and fruitfulness in balance through sustainable soil and water management principles. He keenly emphasizes the importance of the watershed region as a minimum ecosystem unit. The watershed region is an excellent unit for examining a region for long term planning and more appropriate for winegrowing than political boundaries. So important are watersheds to sustainable viticulture that in my opinion when considering designation of a region as an American Viticulture Area (AVA) perhaps a future consideration should be that area encompasses a specific watershed region. Ohmart also draws on his vast experience in IPM to demonstrate how it can serve as a cornerstone of sustainable farming. There is also a chapter on vineyard establishment which outlines the key principles in understanding the vigor of the site and the vineyard nutrient management to keep vines in balance. The final chapter on certification is quite useful. Several regions have developed sustainability certification. After reading this book the winegrower might want to develop a sustainability program if one does not exist in his region. Yet the author is very cautious and advises the grower to introduce the sustainability concepts slowly and deliberately into his practice before trying to establish a regional program. There are several types of certification

programs including process-based, performance-based and practice-based and the author points out their respective advantages and disadvantages.

*View from the Vineyard, A Practical Guide to Sustainable Winegrape Growing* is a useful book for those who are interested in understanding current approaches to this most promising form of viticulture. While the book is largely based on experience in viticulture in California and the West, regions with rather different sustainability challenges from those in the East where my vineyard is located, it nonetheless presents a broad enough based viewpoint so that sustainable vineyard activities can be extrapolated to nearly any regional ecosystem and community. The key points of science-based measurement, data gathering and analysis along with achieving vine balance are emphasized throughout this book as important components of sustainable winegrowing. This is the first and only definitive book on sustainable winegrowing and I highly recommend it to all current and prospective winegrowers.

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SIMONE CINOTTO: *Soft Soil, Black Grapes: The Birth of Italian Winemaking in California*. New York University Press, New York, NY, 2012, 267 pp., ISBN 978-0814717387, \$35 (hardcover), \$15.40 (Kindle Edition).

In the late nineteenth century, peasants from the prosperous and industrially advanced northern Italian province of Piedmont emigrated to California. They transplanted their traditional winemaking skills to the new world, taking advantage of a natural similarity in climatic and topographical characteristics. This identical viticultural terroir and their enological know-how allowed these Piedmontese migrants to take advantage of the openings in a relatively classless frontier society to build empires of wine. They were aided by ethnic economies, with which they were able to mobilize capital from other Piedmontese both in California and back in Italy. Simone Cinotto's new book shows that the preceding statements, while forming an attractive narrative, are almost entirely refuted by a careful look at the history of Italians in the Californian wine industry.

*Soft Soil, Black Grapes* challenges both popular knowledge and conventional historiography, building its case using three examples of Piedmontese entrepreneurs and their companies. While the first two companies have since been absorbed by larger concerns (the Italian Swiss Colony and the Italian Vineyard Company), the third, Ernest and Julio Gallo, is one of the giants of the American wine industry. Cinotto draws on company and public archives, iconographic sources (including his own extensive collection of wine-related ephemera), and a critical review of other books on Californian winemaking.