



RESEARCH • IPM NEWSLETTER

Lodi Rules for Sustainable Winegrowing Program

BY CLIFF OHMART
LWWC Research/IPM Director

What are The Lodi Rules for Sustainable Winegrowing? They are California's first sustainable winegrowing standards that are peer reviewed by scientists, academics and environmentalists. The Lodi Rules Program is open to all LWWC growers on a voluntary basis and supports LWWC's goals of improving quality and Lodi's reputation for quality winegrapes and wine. Growers who chose to participate in the program can get their vineyards certified as producing sustainably-grown winegrapes. We are negotiating with Protected Harvest, a non-profit organization that independently certifies that growers are using stringent environmental growing standards, to be the certifier for The Lodi Rules Program (www.protectedharvest.org).

There are several reasons why LWWC developed The Lodi Rules Program. First, the primary mission of LWWC has always been marketing Lodi as a producer of premium winegrapes and wine. The Lodi Rules is a tool that growers and wineries can use to brand Lodi as a region of family farmers growing winegrapes that make excellent wines and whom are responsible to the land, their workers and the community they farm in. Secondly, a third party sustainable farming certification program may add value to Lodi winegrapes and wine. Thirdly, other wine regions in California are considering the idea of developing sustainable winegrowing certification programs and for Lodi to maintain its leadership in the area of sustainability, it is important we keep out in front. A sustainable winegrowing certification program is already in operation in Oregon called Oregon LIVE and Washington's Walla Walla winegrape growers are in the

process of developing a program based on Oregon LIVE. Finally, overseas markets such as the European Union are starting to express an interest or demand that US growers have programs certifying the safety of their crops for the consumer and use a system that tracks the crop from the field to the processing facility so that food safety is guaranteed, a system known as 'chain of custody'. The Lodi Rules Program will meet these requirements.

Program Development

In April of 2001 a committee of LWWC growers, PCAs, the UC Farm Advisor, and LWWC staff convened to explore the idea of creating a program that could be used to market the Lodi region as a producer of premium winegrapes and wine using sustainable farming practices. The committee reviewed agricultural programs from around the US and other parts of the world that had been created to achieve similar goals. The committee came to three conclusions; 1) A third party certification program provides the most credibility, 2) The farming standards developed should be based on the Lodi Winegrower's Workbook because it is the most rigorous and comprehensive document of its kind, and 3) Wisconsin's Healthy Grown® program certified by Protected Harvest provided the best model. The Healthy Grown® model requires that for a field to be certified the grower must achieve a minimum number of sustainable farming practices points and not exceed a maximum number of environmental impact points resulting from the pesticides used in that field during the year.

In the fall of 2003 the committee mentioned above was expanded to include eleven growers/managers, two pest management consultants, one university researcher, two University farm advisors, a

winemaker, an wildlife biologist, and three LWWC staff members. Using the Lodi Winegrower's Workbook as the foundation, they drafted farming practices standards in the following farm management areas: ecosystem, human resources, soil, water, viticulture and pests. These standards are designed to result in high quality winegrapes and lead to measurable improvements in the environmental health of vineyards and surrounding ecosystem and ultimately add value to Lodi winegrapes.

As in the Healthy Grown® certification program, The Lodi Rules Program has two components; sustainable winegrowing practices standards (The Lodi Rules), and a Pesticide Environmental Assessment System (PEAS) that measures the environmental impact of all the pesticides used in a vineyard during the year. To qualify for certification a vineyard has to achieve a minimum number of sustainable farming practices points based on The Lodi Rules, and not exceed a maximum number of pesticide impact points calculated using PEAS. Certification is awarded to an individual vineyard on an annual basis. Protected Harvest will ensure compliance and chain of custody with The Lodi Rules using an auditing process.

The Lodi Rules Program was unveiled to LWWC growers at a Breakfast Meeting on February 22. Attendees were given the opportunity to sign up to pilot test the program in 2005 with the option of receiving certification this year. A series of workshops will be held for them over the next few months to get them established in the program and improve the likelihood that they will meet the certification requirements. It is not too late to join the program this year! If you are interested in finding out more please call Cliff or Chris and the LWWC office, ph. 209 367 4727.

GROWER PROFILE: *Joe Dexter*

BY CHRIS STORM

It has taken Joe Dexter and his wife Shirley nearly 50 years to discover Lodi, and when they finally did, they immediately fell in love with the region and its wine. The journey that brought Joe to Lodi was a circuitous one beginning when he was born in 1947 in Germiston, South Africa, a small town near Johannesburg.

Joe's father worked for a copper mining company that owned mines throughout Africa's copper belt stretching from South Africa 3,000 miles north into parts of central Africa. Joe spent much of his childhood moving from mine to mine all over the vast region. This constant migration would become a reoccurring theme for much of Joe's childhood and adult life. However, when Joe was old enough, he enrolled in a combination high school/college called the South African College School in Cape Town and stayed put for a few years going to school and working during the summer for a company that maintained gas turbines.

In 1967, Joe joined the South African military, but soon came to realize that the structured life in uniform wasn't for him, so six months after joining, he took a leave of absence and never went back. This leave of absence, which he refers to as an extended vacation, led him on a journey through Europe and in 1970, he made his way to England where he decided to enroll in flight school. It wasn't long before Joe saved up enough money to buy his first plane and soon after, he married Shirley, his long time girlfriend from South Africa. They were married on Black Boy Hill along south west coast of England, which is the very spot that the Mayflower departed for America nearly 400 years ago. Joe too, dreamed of making it to America, but not to escape religious persecution like the pilgrims. Rather, he wanted to go to school to become a commercial airline pilot.

So at the age of 23, he called a travel agency to book a trip to America for his new bride and himself, but mistakenly called an employment agency. While on the phone, the employment agent ironically asked Joe if he had any experience working with gas turbines. Joe had extensive experience from his summer job back in South Africa and he was offered a job on the spot for more money than he could refuse. His plans to reach America were put into a holding pattern and Joe was hired to install gas turbines in Saudi Arabia. Two and a half years later, Joe found another job as an oil field scuba diver fixing pipes and riggings on some of the Arabian Sea oil platforms. Apparently, working on oil rigs is dangerous work because Joe occasionally had to recover bodies of workers who had drowned after falling from the platform. Joe's migratory lifestyle wasn't hampered while working for the oil company. In fact, he toured and lived in Saudi Arabia, Bahrain, Cyprus and many other countries.

While in Cyprus, Shirley gave birth of their daughter, and feeling the pressure to settle down, they decided that New Zealand sounded like a great place to raise a family. They moved in 1976 and soon became citizens. Once in New Zealand, Joe enrolled in the University of Auckland to begin working toward a degree in Aeronautical Science, but never finished. Several years later, the Dexter's dream of moving to America was to become a reality when Continental Airline offered Joe a position as a Boeing flight instructor for their pilots and, having accepted the position, they moved to Alameda, California in 1985. Now in America, he decided to quickly finish the degree that he started back New Zealand and in 1985, Joe graduated with a degree in Aeronautical Science from Columbia Pacific University in San Rafael. Soon he was instructing Continental Airlines pilots in Boeing 727s, 737s, DC10s, and MD80s.

He continued to fly for Continental for another 18 years until 2003, while sitting in a taxi on his way to the airport, Joe was rear-ended by an 18 wheeler. Joe's neck and spinal cord were severely damaged in the accident and he lost his medical certificate to fly. Joe

has undergone surgery to fuse two of his vertebrae together and is scheduled for two more surgeries. The accident has left him with excruciating headaches and reduced neck mobility, but Joe, Shirley and his doctor remain ever optimistic about his recovery.

Aside from being a flight instructor, Joe found time to become a world authority for the Stinson 108-3 plane model manufactured from 1946-1949, of which there are only 600 left in the world. Joe owns three. He also consults and has written technical restoration manuals for the plane's enthusiasts.

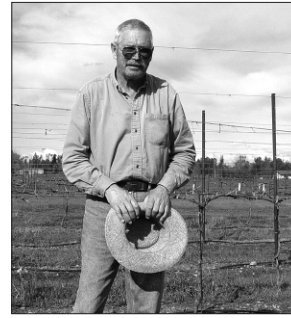
In 1996, Joe and Shirley participated in a fly-in of Stinson enthusiasts to a private grass airfield near the town of Wilton, north east of Galt. The Dexter's fell in love with the location and promptly bought 5 acres adjacent to the very same private grass air strip where the fly-in took place. The property had a large aircraft hanger, a house and 5 acres of undeveloped land. Two years later he bought an adjacent 5 acres of undeveloped land. It wasn't until a truck ride in 1997 with Mike Manna, a local vineyard manager, who drove Joe around the district pointing out all the advantages that Lodi had for growing great wine, that Joe was convinced to plant winegrapes on the open 10 acres. He planted the first 5 acres in 2000 and the second 5 acres in 2003, both with Syrah.

Joe has completed much of the work himself and made extensive use of vineyard establishment publications available from University of California Cooperative Extension. The vineyards are planted into very rocky clay loam soil where water penetration can be problematic. To alleviate this problem, Joe deep ripped before planting but has also planted a beautiful stand of deep rooted Blando brome which he mows after seed set to allow for natural reseeding in the following year. Joe joined the BIFS program in 2004 and enjoys the weekly infield pest monitoring and consultation from LWWC staff. He uses as much information as he can gather for making pest management decisions and is very proud of the fact that he didn't have to apply sulfur once last season.

Because Joe's vineyards are an island of fruit surrounded by ranchettes, pastures and open land, Joe uses bird scares from Bird Guard. In his first year without the bird scares, Joe estimates that he lost about $\frac{1}{3}$ of his crop to bird damage. Since using the Bird Guard scares, Joe guesses he only lost about $\frac{1}{10}$ a ton to birds.

If planting a vineyard wasn't hard enough, Joe and Shirley have also started a winery named Lobo Loco (www.lobolocowines.com). Hal Liske, the winemaker for Del Sol Winery in Livermore, and Joe have a nice deal worked out. Joe provides the grapes, Hal makes the wine, and they split the finished product in half. He has about 250 cases in the barrel right now but would like to increase production to about 500 cases. He is also making a Syrah port and wants to experiment with a Cabernet Sauvignon-Syrah blend. Joe has built a small tank room in his airplane hanger with 12 inch thick high density Styrofoam walls that keep the room at a nice constant cool temperature. Joe's Lobo Loco Syrah is a delicious fruit forward, food-friendly wine which should be available later this year.

Whether restoring antique planes, instructing airline pilots, growing premium winegrapes, or making great wine, Joe Dexter has proven that he can excel in whatever he engages his mind. Unfortunately, it took Joe 50 years of traveling nearly the entire world, to settle down, and finally discover Lodi Wine Country.



ACRES: 10

VARIETIES: Syrah

YEARS IN INDUSTRY: 6 years

IN THE VINEYARD

BY PAUL S. VERDEGAAL

University of California
Cooperative Extension Farm Advisor

A relatively wet winter appears to have provided good soil moisture in vineyards this year. The early harvest in 2004 and a mild fall allowed vines a good opportunity to prepare for winter. And cold temperatures in early winter provided good chilling for the vines to rest. After two smaller than average crops, past experience would indicate a good chance for a big crop. However, some bud dissection and recent research indicates cluster numbers may not be that high this year, from two years of "carryover" effect. Although, the cluster number is set, cluster size, flower number and flower set have yet to be determined. But, the many factors and interactions that will determine what the final crop will be at each vineyard site makes measuring and predicting the 2005 harvest this point a good guessing game.

Rainfall will be above average and vine growth should be good. Fast budbreak might be expected, beginning a few days ahead of a normal in mid March. But things can change dramatically, between now and flower set, let alone by harvest.

Among many vineyard items to do for spring, protecting new shoot growth, nutrient application and irrigation schedules need to be considered. As the market cycle turns up, fruit quality and input cost reductions will continue to be very important factors in management decisions. Unfortunately, these two goals often work against each other, especially during the last three years.

Irrigation continues to be a topic of discussion as more growers "back off" a little from severe deficits. Depending on hot spells and whether a cover crop is present, there should be very good available water in the soil profile. In that case, we shouldn't see some of the stress symptoms of two years ago from dry conditions in the deep soil profile. Last year with adequate but below normal rain and mild temperatures, there was little apparent vine stress. If you are avoiding severe deficits this year, be aware of actual vine water status (pressure bombs still good for that) so don't start irrigating too early. Until mid May, when the vine canopy is still small, evapo-transpiration (ET) is low and the soil profile is still saturated. It doesn't take many hours of application to get too far ahead of actual vine needs. Longer "hang times" have become more common and more of a concern regarding yields, but also they are related to vine irrigation strategy. So, irrigation has become a little more complicated again, but regulated deficit irrigation (RDI) is still one of the biggest steps, if not the first and most significant step, towards improving wine quality. All that said; remain watchful about

getting behind, especially for young vines, vines with nematode problems and of low water holding capacity. There should be plenty of time yet, to make some final scheduling decisions about start time, stress threshold and amount. With the good soil moisture appears, it probably will be late May to June on better soils, before applied water is needed.

Of more immediate concern are budbreak, frost, new shoot growth and protecting shoots from disease infections. It looks as if we have a wet, but relatively normal rain pattern this year. Frost is one topic always lurking in the mind of any grower. There was an LWWC breakfast meeting last December, if you didn't attend, there were some handouts. Let us know if you need copies. To summarize, there is not a lot you can do without spending a lot of money on wind machines or overhead sprinkler irrigation. There has been some new micro-pulsator technology using low flow systems and there are some spray materials that claim effective (one to two degrees) protection. But, five things to remember are: 1) Low areas are susceptible to cold air accumulation resulting in frost; 2) Windless nights of low humidity and low dew point are major concerns; 3) Wet soil that is cultivated (but not the day before) or low cover crop can be slightly warmer than high cover or weeds; 4) Delayed and/or double pruning can delay budbreak and avoid cold conditions for another 10 to 14 days; and 5) If you are going to drip irrigate to "frost protect" you need to apply the water at least 24 to 36 hours ahead to allow some heat accumulation the day before to do any good.

Last year no rain after early February meant very little concern about protecting shoots from anything other than powdery mildew and even that disease pressure was not bad. In 2005 besides the ever-present powdery mildew, there is good reason to be more aware of Phomopsis, Botrytis shoot blight and maybe even downy mildew. A late dormant lime sulfur spray can be helpful in reducing Phomopsis problems and powdery mildew, but after budbreak is the important time to focus on both, irrespective of variety or site. Phomopsis has not been a problem since 1998 and especially as Tokays continue to disappear. Most of the major varieties are not highly susceptible, with the exceptions of Grenache and maybe Syrah. Wetttable sulfur can be very effective, although there are several new materials and captan is still available. Check the UC IPM guidelines and talk with your PCA or give me a call. Wetttable sulfur after budbreak can be a very effective and inexpensive choice for doubling up on an early start to powdery mildew control. Whatever the material

selected, a good powdery mildew program includes: some sulfur, rotation of materials between years, and complete coverage. Downy mildew first made an appearance in the area during 1995 and reappeared in 1998. Although now established in California, downy mildew needs very wet and mild conditions to become a problem. Most of the vinifera varieties are fairly susceptible, but Barbera and Grenache have seemed especially so. Be on the lookout for downy white spots that turn brown and necrotic on the underside of leaves, with corresponding light yellow green patches on the top of the leaf. Sulfur does not control downy mildew. There are effective materials, but check with your PCA or the UC IPM guidelines. Botrytis shoot blight can be a problem, if conditions stay cool and wet as in 1998 and 1995. Scattered shoots that wilt and die anywhere from just below the growing tip to more than halfway down, with some fuzzy gray mold at that point or scattered clusters that wither in part or entirely, is most likely early Botrytis. Usually the number of affected shoots is very minimal and only becomes a real problem in year such as 1995 and 1998. Syrah and Viognier seem to be very susceptible and clusters on Symphony have shown severe problems. Botrytis sprays can be helpful, but probably cost effective, unless one of the other spring diseases are in need of control. Back to more normal concerns; hold off on any nitrogen fertilizers until after bloom, unless an organic material is being considered.

And finally, the still relatively new and unfortunate topic to is the presence of Vine Mealy bug (VMB), which is being found throughout the state and has been identified in several locations in District 11. The over wintering crawlers tend to be small and inactive until after budbreak, but if you find vines with heavy amounts of black sooty mold, check those vines very closely. Look in any cracks crevices and loose bark and even down into the soil on large roots. Also note if there is a high amount of ant activity fairly early. Talk with your PCA or check www.ipm.ucdavis.edu or www.vinemealybug.uckac.edu. Also, don't forget about the Glassy Winged Sharp Shooter (GWSS) and the Western Grape Leaf Skeletonizer (WGLS), they both are still lurking to the south and north of San Joaquin County.

There are many challenges ahead, but the Lodi District and San Joaquin County are positioned to accept those challenges, as well as the well-deserved recognition for the local wines. Good luck and Good Times in 2005.

SPECIAL FIELD DAY ANNOUNCEMENT
*Best Management Practices for
Ag Water Quality*
MARCH 23, 2005

Presented by the San Joaquin County Resource Conservation District and sponsored by the San Joaquin County and Delta Water Quality Coalition. Coalition members are strongly urged to attend. To be held March 23, 2005 from 8:00am to 12:30 followed by lunch. The event will be located at USDA Plant Material Center, 21001 N. Elliott Rd., Lockeford.

Presentations will be made on the following topics: Best management practices for Lodi vineyards, pesticide drift management, vegetating canal banks, drainages, sloughs, roadsides, and tail water ponds with native plants, grassed waterways as filter strips for sediment, pesticides and fertilizers, and technical and financial assistance for using best management practices in Lodi vineyards and orchards.

Session leaders include: Deputy San Joaquin County Ag Commissioner Gary Stockel, Mick Canaveri of UC Extension, Cliff Ohmart and Chris Storm of the Lodi-Woodbridge Winegrape Commission, Native Plant Specialist John Anderson, and Dave Dyer, Amy Rocha, and Terry Dean of the USDA NRCS.

2 PCA CONTINUING EDUCATION HOURS HAVE BEEN APPLIED FOR.

OTHER MEETINGS & EVENTS:

MARCH 16 & 17, 2005:

17th Annual Central Valley CVPE Plant Engineering and Facilities Maintenance Show. Modesto Centre Plaza, Modesto. Go to www.ProShows.com/cvpe for more information.

Introduction to Natural Resource Conservation Service's Conservation Security Program (CSP) will be held on the following dates and times and locations:

March 29 at 5pm: Herald Fire Station

March 31 at 5pm: Cortland High Auditorium

March 24 2-4pm: Central Valley Waste Management Services, 1333 East Turner Rd., Lodi.

Contact the NRCS office in Stockton for more information at Ph. (209) 472 7127.

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