

November 1, 1981

Director
Bureau of Alcohol, Tobacco & Firearms
P. O. Box 385
Washington, D. C. 20044

Dear Sir:

The undersigned winegrowers and vintners hereby petition for establishment of the viticultural area to be known as "Arroyo Seco" pursuant to the provisions of Title 27 CFR, Part 4. In support of this petition, we submit the following:

1. Evidence that Arroyo Seco viticultural area is locally and/or nationally known as referring to the area specified in this petition.

Historically "Arroyo Seco" is the name designating a rancho established by a Spanish land grant which included lands bordering the Arroyo Seco River. The name has been used continually through the years in conjunction with the river and rancho however, its link to a viticultural area is relatively recent. Exhibit #1 includes a list of books, the Winkler-Amerine report, marked clips from magazines, and newspapers that use the term "Arroyo Seco" as the accepted name for the region. These well known writers are specialists in the world of wine and have a large following of consumers. Their use of the term "Arroyo Seco" has put the name into common usage by the wine buyer. That the name is locally and/or nationally known is evident from all these references.

2. Historical or current evidence that the boundaries of the viticultural area are as specified in the application.

The Arroyo Seco area was identified as a potential grape growing region by the Winkler-Amerine report in 1935. "A number of soils in different areas of the Salinas Valley are adapted for grapes. Yet the greatest promise is offered by the Greenfield series of soils that occupies the lower gentle slopes on the terrace west of the Salinas River, extending from about opposite Gonzales to and including the Arroyo Seco Valley." However, the area's history of actual vineyard planting did not begin until the early 1960's. The area mentioned now has a large acreage of grapes, two wineries and a third one being built. It is remarkable that in less than twenty years the term "Arroyo Seco" is now used to distinguish that particular grape growing area of Monterey.

3. Evidence relating to the geographical features: climate, soil, elevation, physical features, etc., which distinguish the viticultural features of the proposed area from the surrounding areas.

The Arroyo Seco Viticultural Area as proposed is distinguished by the following characteristics:

Climate - The climate is unique to the Arroyo Seco area in amount of rainfall, temperature range, and the variability of the winds. The major climatic influence is the Pacific Ocean and the Monterey Bay. The cooling ocean breeze which blows through the Arroyo Seco region contributes to the moderate climate.

There is a wide range of wind variability in the Salinas Valley. The Arroyo Seco area as delineated takes this into consideration. The juxtaposition of the Sierras de Salinas to the Arroyo Seco Valley causes the winds to be stronger east of U.S. Highway 101. A pocket-like effect is created in the Arroyo Seco Valley which has milder wind currents. Therefore, the proposed eastern border is U.S. Highway 101.

The low rainfall in the region allows for controlled water management. All of the vineyards in the proposed area draw water from the Arroyo Seco River for use in supplemental irrigation. For this reason, the vineyards included in the Arroyo Seco area can be considered unique.

Measurements of the regions climate, in terms of "degree days", place it in District I and II. See the attached Figures 4, 5, 10, and 13 for Temperature and Precipitation data and a degree day map (Exhibit II).

Soils - The soil series consists of gravelly and fine sandy loams well suited to the cultivation of grapes and to other field and row crops. Generally the proposed viticultural area consists of several series formed in alluvium creating well-drained soils. Slopes range from 0 to 9 percent. The soil series represented in the proposed viticultural area include primarily Greenfield, Mocho, Lockwood, Arroyo Seco, Rincon, Elder, and Chular. Attached is Exhibit III which includes excerpts from the Soil Survey of Monterey County, California published by the United States Department of Agriculture, Soil Conservation Service. As further evidence, it was stated in a University of California newsletter, the "added advantages of the region are that the vineyards are on sloping bench land, high above the valley floor with adequate drainage and freedom from frost. The soil composition is principally Chular and Greenfield coarse sandy loam, consisting of decomposed granite washed down from the Gavilans through the centuries, gravelly and low in lime content like the vineyards of The Medoc and Graves districts of Bordeaux and the better vineyards in the Palatinate."

The proposed Arroyo Seco viticultural area is based on similar topography, weather, irrigation sources, and generally like-soil types which produce grapes distinct from those to the north or south in the Salinas Valley.

4. The specific boundaries of the viticultural area, based on features which can be found on a U.S. Geological Survey map of the largest applicable scale, are as follows:

Beginning at the junction of the Arroyo Seco Road and the Carmel Valley Road, follow the Arroyo Seco Road east to the southwest corner of Section 22; thence continue along the southern borders of Sections 22, 23, 24, 19, and 20 to the southeasternmost point of Section 20; thence in an easterly line to the summit of Pettits Peak; thence in a northeasterly direction to the point where the Arroyo Seco Grant Line intersects the northern border of Section 15; thence continue in an easterly direction along the northern boundaries of Sections 15, 14, and 13, to the northeast corner of Section 13; thence due east to a point which intersects Central Avenue; thence south on Central Avenue to the intersection of

Underwood Road; thence east on Underwood Road to the Grant Boundary line of Posa de los Ositos; thence northeast along the Grant Boundary to the west bank of the Salinas River; thence in a northerly direction to the point that intersects the southern border of Section 17; thence due west on the southern border of Section 17 to the southwestern corner; thence due west to a point which intersects U.S. Highway 101; thence in a northerly direction along U.S. Highway 101 to the intersection of the Arroyo Seco Road; thence southwest to Paraiso Road (also known as the Arroyo Seco Grant Line Boundary) to the point which intersects Clark Road; thence due south to the northeast corner of Section 5; thence due south on the eastern boundary of Sections 5, 8, and 17 to the point which intersects the Arroyo Seco Road; thence in a southwesterly line to BM 673; thence in a westerly line to BM 649; thence to the northeast corner of Section 23; thence in a westerly direction along the northern border of Section 23 continuing to the northeast corner of Section 22; thence in a line to the junction of the Arroyo Seco Road and Carmel Valley Road and the point of beginning.

5. A Copy of the appropriate map with the boundaries prominently marked is attached as Exhibit IV.

Thank you for your consideration of our petition, and we would be pleased to answer any questions that may arise.*

Sincerely,

ARROYO SECO WINEGROWERS AND VINTNERS

*Contact: Carolyn Wentz, Wentz Bros., [REDACTED], Livermore, CA 94550
[REDACTED]

ARROYO SECO

VINTNERS & GROWERS

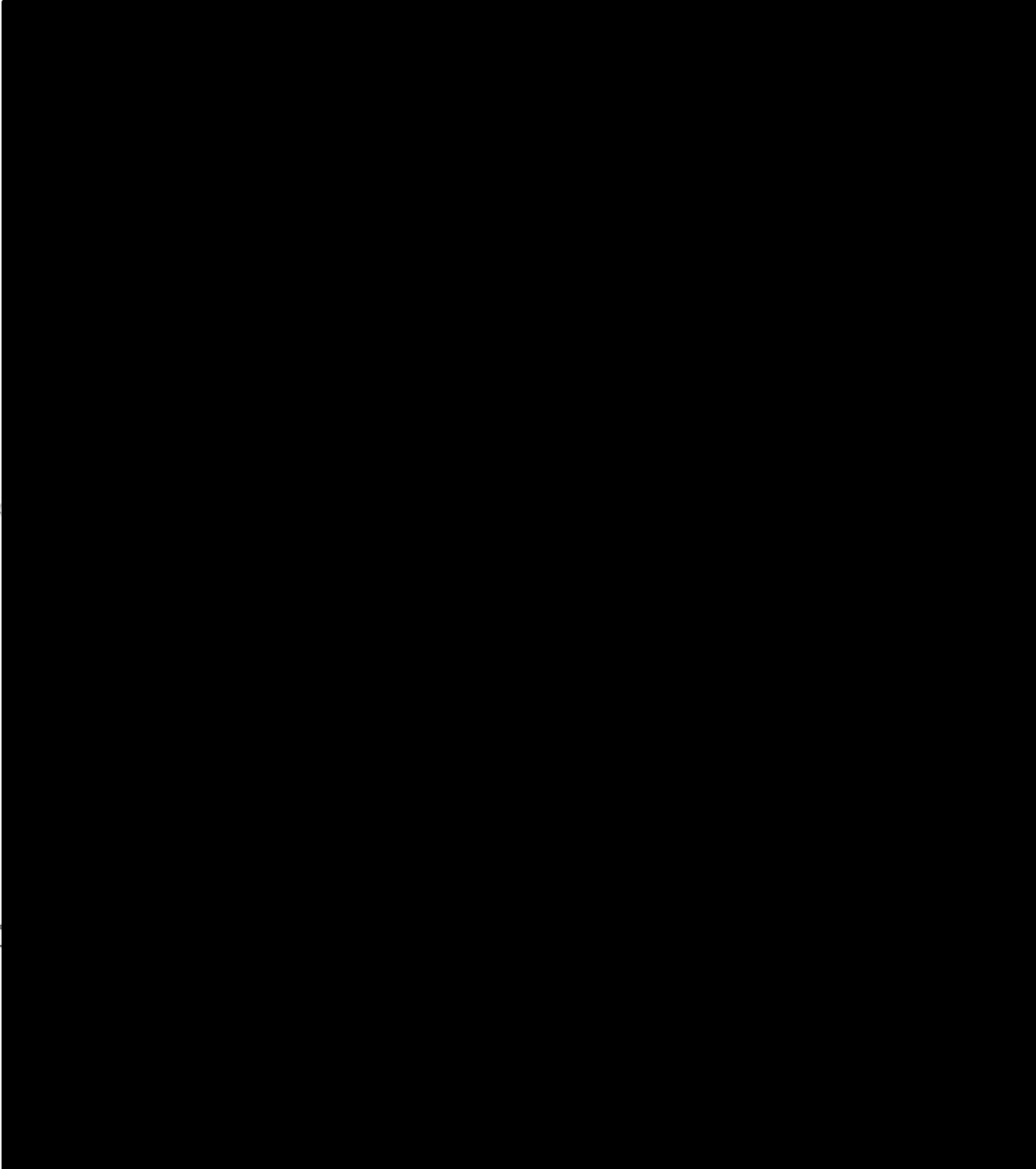


EXHIBIT I

Excerpts from books recognizing Arroyo Seco as a wine/grape area:

Central Coast. Richard Paul Hinkle. Vintage Image, St. Helena, CA 1977.

pp. 26-27 tell of the move south by Wente Bros., Paul Masson and Mirassou. The special botrytis cinerea on the White Riesling, Semillon, and Sauvignon Blanc is mentioned. Wente Bros. Arroyo Seco vineyards produced the first late harvest Riesling from the area.

The Wines of America. 2nd ed. revised. Leon D. Adams. McGraw-Hill Book Company. N.Y. 1978.

pp. 383-384. Relates the Winkler-Amerine study on heat summation zones, the planting of vineyards in the Arroyo Seco area, the innovative farming practices.

The World Atlas of Wine. Hugh Johnson. Mitchell Beazley, Ltd., London 1971.

pp. 220. Notes the move south by Masson, Mirassou and Wente (Arroyo Seco).

California Wine. by the Editors of Sunset Books. Lane Magazine and Book Company, Menlo Park, CA. 1973.

pp. 75-77. Describes the fact the scientific research can uncover new vineyard districts. Pictures the Wente Arroyo Seco Vineyard.

New winery's first grape crush will be this fall

'Premium varietal wines' are the goal

Premium wines, made from grapes grown, crushed, fermented, aged and bottled just outside Greenfield, should be ready for consumers by the fall of 1979.

That was the estimate offered by Bill Jekel during a weekend tour of his fledgling winery under construction north of Walnut Avenue between 12th and 13th Streets. A joint venture with his twin brother Gus, The Jekel Vineyards winery will crush grapes this fall and have the Jekel Vineyards label in Los Angeles and San Francisco as soon as possible.

Construction on the 9,000-square-foot winery started late last month. Most of the concrete floor has been poured and steel girders can now be seen poking above the grape vines that

surround the structure. The winery's first grape crush will begin in September, Jekel said, and continue through November. Four premium varietal wines will eventually be produced, all from grapes grown on the 140-acre parcel. Grapes Jekel Vineyards doesn't use are sold to Wente Brothers, he noted.

Two white wines — Johannesburg Riesling and Chardonnay—and two red wines—Cabernet Sauvignon and Pinot Noir g.b. (for Gamay Beaujolais)—will eventually spotlight Greenfield and South County for the grape and wine region it is quickly becoming.

"I think this whole Valley in a few years is going to be a winery touring area, similar to Napa," Jekel predicted.

"We think we have one of the outstanding potentials for wine anywhere in the state right here."

He termed Greenfield a "particularly ideal place" for grapes and a winery because it is far enough south in the Valley so that temperatures are fairly warm, the soil is rocky enough so that water percolates well and, in Jekel's case, the grapes are irrigated with water originating in the Arroyo Seco, rather than from the Salinas River. Those three factors contribute to an environment very suitable for grapes.

Jekel said he considered locations throughout the state and was finally convinced Greenfield was the place to establish his vineyards. He talked with

farm advisors and wine experts, including Carl Wente, before setting on Monterey County.

Planting of grapes began in 1972 and "the winery has become a natural extension of that," Jekel said. The facility should be fully operative in 1980.

Tastings and tours will begin as soon as the first wines are ready for consumption.

Jekel is a relative newcomer to the wine industry. A lawyer by training, he has always enjoyed a good glass of wine and decided to enter the agriculture-related business for the same reason many persons who live in cities do.

"Many people who are locked into careers in cities hanker to do something that brings them back to the land," the Los Angeles resident explained. His new enterprise has certainly done that. Lately Jekel has been in Greenfield most weekends (and many week days) to oversee construction of the winery. When he's not here, care of the grapes is in the hands of Tony Ramirez, vineyard manager, who lives amidst the vines and next to the winery.

Jekel noted he has received much valuable assistance from others who make their living with wine. He singled out Wente and Dr. Richard Peterson of Monterey Vineyards. The latter helped design Jekel's winery.

Wine making at Jekel Vineyards will be managed by Rick Jekel, Bill's son, who is a viticulture and enology major at the University of California at Davis. Rick too

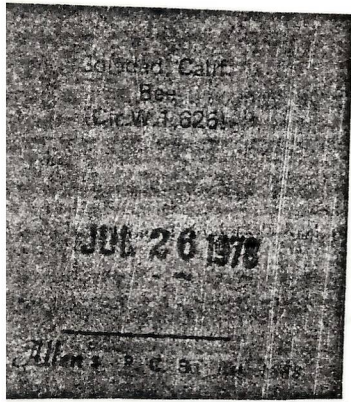
key elements in the winemaking process.

"We are aiming at producing the very highest quality wine that can be produced in California."

being constructed by Mill Construction Company of Salinas, will have a metal exterior and will be completely insulated. Interior temperature and humidity will be carefully controlled.

The fermentation room will house 12 stainless steel tanks (with room for four more eventually). It is the room in which the crushed grapes begin their journey into wine.

The building which is will soon be in Greenfield as construction of the winery progresses and as the time nears for the first crush. The building, which measures 100 feet by 90 feet, is essentially divided into four sections.



Ventana grapes produce prize winning wines

Ventana Vineyard on Los Coches road received a winning nod from judges at the California State Fair in Sacramento during judging of homemade wines.

Wines using grapes from Ventana vines captured the best of show gold medal and took first and third in Reisling (a sweet, white wine) division of the contest.

OUT OF hundreds of homemade wine entrees, the Reisling wine, made by Doug Meador, part owner of Ventana Vineyards, took the

medal for the best of show and first place in the Reisling category.

A San Francisco winemaker, who bought his grapes from the Ventana vineyards, took third.

Having tried his hand at wine making for five years, Meador said that most of his attempts have been dumped on the grounds and the barrel thrown away, but this hand selected, late harvest Reisling was a definite exception to the rule.

Although white wines are difficult to make because they must be worked under a layer of carbon dioxide to keep oxygen away to avoid turning the wine brown and acquiring a caramel taste, the prize winning Reisling was especially hard because it has a low alcohol, high sugar content which makes it hard to start the fermentation.

THE VARIOUS wine categories were judged on a home wine maker scale and included testing the balance of the grape, the aroma, the taste and the sulfur content.

The first place wines were moved up to the best of show competition and were judged by commercial wine standards.

Since most of the wines entered at the Sacramento fair had won prizes in other competitions, Meador said he found it especially gratifying that his wine the first he has ever entered in a contest, was top overall in stiff competition.

He was also pleased to have grown the fruit for two prize winning wines.

"You can't make a good wine out of a bad grape," said Meador with pride.

MEADOR, an ex-Navy pilot, started growing grapes about six years ago on 300 bare acres which he has changed over to productive vineyards.

HE HAD some farming experience behind him since he had raised apples in Washington, but raising grapes was "a whole new bowl of fruit."

He said he knew next to nothing about grapes, but he has learned from reading, talking with experts and experience.

Meador explained that "making wine leads to better grape growing." He feels it helps him "to understand the grape problem from the view of the winemakers so we can grow the grapes to that end."

Since he started making wine, he has made changes in his growing methods.

Meador and his partner, Ralph Gonzales, are making other changes in their operation. This season, they hope to deliver grapes to buyers stemmed crushed and pressed.

Their biggest advancement will be the construction of a winery which they hope to start building in the winter of 1979. They say it will be a small winery with most of their grapes still being sold to buyers.

The winery will probably be featuring the winning Reisling as well as another Meador wine, a Chardonnay.



A PROUD SMILE is given by Doug Meador who produce both the wine and the grape which won the best of show gold medal at the California state fair homemade wine contest. The Reisling wine was also the first place winner in its division.

Promising new areas for Premium Quality Wine Grapes

to replace acreage lost to urbanization

Many excellent vineyards near cities and towns in the central coast district of California have been displaced by new highways, new subdivisions and other urban facilities.

Possible new locations for the production of wine grape varieties of high quality were surveyed and evaluated for suitable climatological and soil conditions. For evaluation of areas remote from present grape-producing districts, samples of fruit were collected and analyzed.

Loss of grape acreage has been heaviest in Napa, Sonoma, and Santa Clara counties. Those three counties, and Mendocino County, once supported grape plantings of two to three times the present acreages. Some of the early plantings were on slopes too steep for present implements but considerable land in each of those four counties is available. Because of erosion, some of this available land probably is not as productive as it once was, but high tonnage is not such an important requisite with premium-quality varieties. Old vineyards and plantings of other fruit crops on excellent grape land are always being removed—for one reason or another—which makes land available for quality wine grape varieties in proved areas.

Vineyards of common grape varieties, in good locations successfully grafted over to quality wine varieties should be producing practically full crops in two years.

Potential Areas

In Napa County, the Carneros district, the Wooden Valley, and the Chiles Valley and the Pope Valley possess considerable acreages that are favorable for grapes.

The heat summation of the Carneros district is most promising for premium grapes of best quality. The district is as cool as any area now used, or cooler, and the grapes growing there are sufficient to demonstrate its suitability. The San Ysidro loam soils of the district are

not deep, yet the cool climate enables the vines to produce without irrigation. The subsoil is heavy-textured, tight, and compact, restricting root penetration. Drainage may be desirable. In this soil, vine development is limited and production only moderate.

Wooden Valley lies over the low mountains to the northeast of the city of Napa. It is in climatic region II, with a rainfall somewhat higher than that of the city of Napa. Wooden Valley is cooled by the movement of air and fog over the mountains from the Napa Valley and up through the Gordon Valley from Suisun. The Hugo clay loam soil, the principal soil of the area, is moderately heavy but responds well to cultural operations. It is not a deep soil, yet it supports vineyards and prune and walnut orchards without irrigation. The tonnage and quality of the grapes in production are good for the varieties involved.

The Chiles Valley and the Pope Valley are east and northeast from Saint Helena over a ridge of mountains. The climatic region is probably warm Region III, although there is no Weather Bureau Station in either valley. The rainfall is ample. There are a number of flourishing vineyards in each valley. Production and quality are good for the varieties now grown. Irrigation is used to some extent, and would be advantageous in establishing new plantings but none of the mature vineyards is irrigated. Hugo clay loam is the principal soil in both the Chiles and the Pope valleys.

The spring frost hazard in Wooden, Chiles, and Pope valleys is essentially the same as in the Napa Valley. Since 1937 there has been only one year in which Wooden Valley was hit harder by frost than the Napa Valley. Records available for the Carneros district and Chiles and Pope valleys cover only a limited number of years. Nevertheless, in the years of record those areas suffered no more frost damage than the Napa Valley.

In Sonoma County, there are four

promising areas. Two of the areas are in Climatic Region I; the area from around Sebastopol to Forestville, primarily planted to apples; and the area to the east and southeast of Sonoma. The third area, the ridge between the Sonoma and Napa valleys to the north of Sonoma, is in Region II. The fourth area, Knights Valley, probably is in Region III. There is no Weather Bureau Station in Knights Valley, but it may be assumed that the heat summation falls between those of Healdsburg and Calistoga. Rainfall is ample in all four areas, where the soil is deep enough to store the water.

The soils of the Sebastopol-Forestville area are—for the most part—fine-sandy loams of the Goldridge, Altamont, and Yolo series and excellent for fruit and grapes. The deep soils should not require irrigation, but water is available in most of the area.

The area to the east and southeast of Sonoma is an old grape area where the earlier plantings were destroyed by phylloxera. With rootstocks resistant to phylloxera it is now possible to grow grapes there again. The deeper, fertile soils of the Laguna and Pleasanton series will store enough winter rainfall to produce grapes without irrigation but water to irrigate is available when necessary. The

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W. G. Wilde..... Editor

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heavy soils of the area are not suitable for the production of quality wine grape varieties.

Several vineyards on the ridge between the Sonoma and Napa valleys—notably Monte Rosso—are productive.

Knights Valley has a few thriving small vineyards. Although the soils of Knights Valley have not been mapped, the growing vineyards demonstrate the suitability of the deep soils which will support vines without irrigation.

Spring frosts are no more of a hazard in the four promising areas of Sonoma County than in nearby areas where grapes are grown successfully.

In Mendocino County, the arable lands of the Ukiah Valley and the Redwood Valley, the principal areas of the county, have been farmed in their entirety for years. However, east of Hopland is the McDowell Valley, a rather large area, used for pasture or farmed to annual crops. The soils of McDowell Valley are of the Yolo and Pinole series and are suitable for grapes. A similar, though smaller, area of soils is west of Hopland, south of Feliz Creek. Water for irrigation is not available in either valley, so only the deep soils that will store a sufficient amount of the winter rainfall can produce a crop of grapes. The average rainfall of 37.3" is more than ample.

The above Mendocino County valley areas fall within Climatic Region III.

Composition of Wine Grape Varieties Collected in Anderson Valley, Mendocino County

Variety	Degree Balling	Acidity %	pH
French Colombard ..	23.1	0.90	3.16 1960 only
Muscat			
Pinelli	22.2	0.83	3.20 3 yr. ave.
Rousseau ...	23.3	0.83	3.11 3 yr. ave.
Zinfandel ..	21.0	1.19	3.09 3 yr. ave.

Fields on the deep, fertile soils should be high but the summation of heat is too high for success with most of the premium-quality grape varieties. The spring frost hazard here is about the same as in their parts of the Ukiah where grapes are grown.

The Anderson Valley along the Navarro River—on the basis of heat summation—is in Climatic Region I. Some land is producing very good apple orchards, and the few existing vineyards are doing well. Rainfall is ample. In the larger part of the valley, between Philo and Navarro, considerable land now in pasture should grow the best varieties of grapes in tonnages of moderate and above. The deep soils on the undulating lower slope of the hills do not require

irrigation but water is available near the river. The spring frost hazard is about the same as in the other central coastal areas.

The small valleys around Comptche also offer promise because the soils, when selected with care, are amply deep and fertile. These valleys are probably in Region II and should be relatively frost-free.

In Santa Clara County, there are small acreages suitable for quality grapes on both sides of the valley, but there are no large areas available north of Gilroy.

A larger area of good soils, predominantly Yolo series, lies along Carnadero Creek and to the south of Gilroy, almost to the county line on both sides of the valley proper. The heavy, poorly drained soils on the central valley floor are not suitable for vineyards.

The annual average rainfall at Gilroy is 20.0" and the heat summation places the area in Climatic Region II. Water is available for irrigation.

In San Benito and Santa Cruz counties, available land suitable for grapes is very limited.

In Monterey County, the temperature and soils of parts of the county combine to provide favorable conditions for the growing of fine-quality grapes. Heat summation data place Salinas and Spreckels in the coolest part, and Gonzales in the middle of Region I. The strong winds that blow directly off the ocean keep the area—the north end of the Salinas Valley—cool. Further inland the valley becomes warmer. Soledad is near the top of Region II, and King City is in Region III. San Miguel, just beyond the county line, is in Region IV.

A number of soils in different areas of the Salinas Valley are adapted for grapes. Yet the greatest promise is offered by the Greenfield series of soils that occupies the lower gentle slopes on the terrace west of the Salinas River, extending from about opposite Gonzales to and including the Arroyo Seco Valley. Much of this area is open range land, other parts are farmed to annual crops, some to vegetable, and a few small tracts produce apricots and other fruits. Several garden plantings of grapes in the area—mostly table sorts—are doing well. A sample of Grenach collected on September 28, 1960, had a degree Balling—maturity—reading of 21.9, an acidity of 0.90% and a pH of 2.99.

A second promising soil, the Chular series, occupies large areas on the lower slopes to the east of the Salinas River from Salinas to beyond Soledad. The

deep soils of the sandy and loam phases of this soil are suited to grapes. A sample of Zinfandel collected on September 28, 1960, from a commercial vineyard near Soledad, had a degree Balling reading of 24.3, an acidity of 0.90%, and a pH of 2.95.

Other series of soils found in the floor of the Salinas Valley are excellent for grapes but are farmed intensively to crops producing higher returns.

The average annual rainfall at Salinas is 13.7", at Spreckels 13.0", Gonzales 12.3", Soledad 9.5", and at King City 10.3". Irrigation water is available but the pumping lift in some areas is rather high, varying almost directly with elevation above the river bed.

The favorable soil-temperature combination of the Salinas Valley area is offset by wind, which blows almost every afternoon during the growing season, and often reaches 15 to 30 miles per hour, or more. However, the few vines observed in the valley showed little or no ill effects because they were protected by windbreaks or home plantings and buildings. Without windbreaks, many shoots probably would be broken off soon after the vines leaf out in spring.

In the lower end of the Salinas Valley the wet fogs would be a factor in mildew control because the moisture that condenses on the vines would remove the fungicides used to prevent mildew. The fog might also contribute to the development of bunch rot. The detrimental influence of fog should not extend beyond Gonzales.

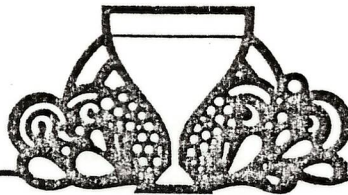
In southern California, Climatic Regions I, II, and III are, in general, confined to the higher slopes, where spring frosts become an increasing hazard. There are limited areas of suitable land in Santa Barbara County, but competition would be keen with urbanization and crops of higher returns, such as sugar beets and flower seeds.

On the slopes of the Sierra Nevada, adjacent to the interior valleys, there are no Climatic Regions I, II, and III not known to be periodically subject to rather severe spring frosts.

The survey disclosed an estimated 10 to 25 thousand acres of land suitable for premium quality wine grape varieties to replace the production of former acreage lost to the encroachment of urbanization.

A. J. Winkler is Professor of Viticulture, University of California, Davis.

County Farm Advisors of the University of California Agricultural Extension Service in the areas concerned assisted in the survey of potential grape acreage.



MONTEREY . . . TOMORROW'S WINELAND

About a year ago, WINELINES featured a report on the tremendous expansion of California wine acreage, highlighting Monterey County. At that time we pointed out that there was more bearing acreage of cabernet sauvignon, chardonnay, zinfandel, white riesling and chenin blanc in Monterey Country than in Napa Country. This was meant as a warning to the wine drinking public that it is now necessary to rethink and readjust our sensibilities to the large amounts of familiar varietals from unfamiliar climates that will fill the retailer's shelves in the next several years. Just as we have seen California wines from Napa and Sonoma first imitate the European model, then find a level of their own equal to or superior to that model, so too must we deal with Monterey County wines. Fact is, they are not, nor will they ever be, Napa and Sonoma-styled wines. We must understand and appreciate them as they are, and not flaw them because they do not taste or smell like their northern counterparts.

There is a positive side of this story. Maybe the grape growing area, the climate and the soil, of Monterey is more conducive to certain varietals. Maybe Monterey produces a varietal that is more like the European model. Of course, this is the rationale behind most of the plantings in Monterey Country, and as wine drinkers and collectors, we certainly hope that this may be the case. At any rate, we will find out more about each varietal because of the Monterey plantings, and it is our fervent hope that excellence and style will evolve from Monterey wineries.

To that point, we recently attended the annual luncheon of the Monterey Winegrowers Council in San Francisco in December, and we are pleased to report that the Monterey vineyards and wineries are emerging into that self-same limelight they deserve. Much has been written in criticism of the Monterey County vegetative smell. We have often commented on the artichoke smell in certain white wines from Monterey. This is a very earthy smell that is unique in Monterey wines. There is also much botrytis in the Monterey region resulting in a concentration of aroma and a complexity that some North Coast wines lack. In short, there are many plusses and minuses in Monterey, and only time will tell as to the net result.

One thing is evolving overall from the Monterey County products: they are improving year by year. They are becoming quite competitive in certain varietals, and indeed signs of a better product coming from Monterey than from the North Coast is also surfacing. New life has been infused into such wineries as Mirassou, Paul Masson, Wente Brothers and San Martin. This is not to say that these firms have not consistently produced fine products. It is only to point out that the characteristics of their releases have improved by the inclusion of Monterey County grapes. Wente Brothers for one has really come on stream with their Pinot Blanc, Johannisberg Riesling and Blancs de Blancs. Their immense plantings in Monterey, especially in the Arroyo Seco area, just west of the city of Greenfield, have produced some exquisite wines. Even more importantly, the qualities of these fine releases have been echoed in many subsequent vintages. Mirassou is another winery that has emerged as a contender on the California scene. We have always been a fan of their petite sirah because of their devotion to capturing the varietal essence of the grape. Their gamay wines are lovely, especially their nouveau style product. What Mirassou has demonstrated is that red as well as white wines can be successfully produced in Monterey. They have overcome the vegetable aroma in their red wines, much to their credit technologically.

White wines from Monterey, especially the varietals that produce the more delicate wines like johannisberg riesling and chenin blanc, are an interesting case in and of themselves. A luxury they enjoy is being picked by the mechanical harvester. The vineyards are planted specifically to

accommodate the mechanical picker and crusher, and the juice is returned to the winery in tanker trucks enveloped in carbon dioxide. This allows the juice as little contact as possible with the air, resulting in a fresher, more flowery wine. Mirassou's whites are one example of this technology.

The wines we sampled at the Monterey Winegrowers Council Luncheon were:

1977 Pinot Blanc, Wente Brothers, Monterey, \$3.50 (when released)

Made in a style to rival chardonnay, this wine has a fresh, fruity nose with a grassy, apple aroma. Very little oak was used in this wine, but even that blush of oak is a departure for Wente Brothers. Lively acid flavor, the wine is made in a very agreeable style that would be excellent with fish or fowl. There are no flaws in this wine.

1977 Chenin Blanc, Durney Vineyard, Carmel Valley, \$3.95 (when released)

Limited quantity from this new Carmel Valley winery, Durney only produced 800 cases of this wine in 1977. Durney stresses the unique and distinct climate of their vineyards vis a vis other Monterey County wineries. The wine has a soapy aroma, yet is crisp, acidic and dry on the palate with much flavor. A quite pleasant wine released at an affordable price.

1977 Chenin Blanc, Chalone Vineyard, California \$5.75

Chalone is the original boutique winery. It is sold on its own uniqueness. So would you if you only got 10-12 inches of rain a year in your vineyards, and were forced to truck your water in. Beside that, there is strict adherence to old-fashioned methods. Only oak fermentation and aging in all varietals (pinot noir, pinot blanc and chardonnay are the others). This chenin blanc is the first produced by Chalone that includes grapes from other sources. The drought forced Chalone to buy grapes for the first time in 1977. There is a strong presence of oak throughout the wine, complimented by much fruit and dryness. Age is necessary for all Chalone wines, and if you have not had the luxury of trying one, it is indeed a worthwhile experience.

1977 Johannisberg Riesling, Turgeon & Lohr Winery, Monterey \$5.00

Made in the German Moselle style with some residual sugar, this wine represents the third vintage of this San Jose winery. Here is a mechanically-harvested wine that was fermented for six months in cold fermentation. It has a vegetative, earthy aroma that is supported by fruit and a slight hint of botrytis. On the palate, the wine is drier than expected, but extremely flavorful. An excellent effort.

1977 Chardonnay, Paul Masson Vineyards, Monterey \$6.00 (when released)

Bottled in October 1978, we could not help thinking this wine was bottle shocked. It had not settled to reveal the characteristics of the wine. That is to say that we hoped that this had more character than it did. It was very austere and showed itself to be uni-dimensional at present. We will retaste at another time. There will be 10,000 cases of this wine when it is released in 1979. It was aged for 26 weeks in new 60-gallon Limousin oak casks, a first for Paul Masson. As the commercial says, "We will sell no wine before its time." Alas! This wine was the exception to that rule.

1977 Gewurztraminer, The Monterey Vineyard, Monterey \$4.50

There were 4,000 cases of this wine produced. The Monterey climate seems to produce very spicy gewurztraminers. It may be ideal for gewurztraminer along with Sonoma County in California. The Monterey Vineyard has made a sound wine here, yet it reeks of the metallic, earthy Monterey malady we discussed earlier in this article. This flaw permeates the taste. You cannot avoid it. Better luck next time.

1975 Petite Sirah, San Martin Winery, Monterey, Limited Vintage \$3.50 (when released)

Only 2,200 cases of this exceptional wine were produced at the remarkable price of \$3.50. It has been many moons since we have found such a bargain. This is a 100% varietal wine that received a silver medal at the Los Angeles Fair competition. The wine is chewy without being overpowering. There is much flavor and aging potential. New oak was used for cellar aging. The color is excellent and the varietal character considerable. We cannot overpraise this wine . . . it is exquisite.

1975 Petite Sirah, Mirassou Vineyards, Monterey, Harvest Selection, \$5.00-5.50 (when released)

Bravo! Here is another winner in petite sirah from Mirassou. They have captured the peppery, eucalyptus nature of the varietal in this unfiltered wine. The color is intense purple, the alcohol just right at 13.3%, and the aging potential is five to seven years.

1975 Cabernet Sauvignon, Monterey Peninsula Winery, Monterey, \$9.00

Dark and rich in color, the only flaw in this wine is the rich, roasted aroma that is slightly bent out of shape by the Monterey County vegetative aroma. It is excellent on the palate, without the vegetative confirmation. The flavor is very much cabernet essence, and the aging potential of

August 1978

East of Eden Revisited

Salinas Valley: California's newest region of fine wines

by Richard Albert, Jr.

Rarely do you have the chance to witness the birth of a great wine-growing region, but you can do that in Monterey County right now. In two short decades the Salinas Valley—the center of wine-growing activity in the County—has produced some remarkable wines and, by all evidence, those that have been produced are just hints of what is yet to come. As Dr. Richard Peterson of the Monterey Vineyard says, "Monterey won't compete directly with Napa, because the climates and soils—and wines—are so different. But Monterey will be as highly regarded for its wine quality as is Napa Valley."

Such optimism reflects an unusual faith in the potential of the Salinas Valley. Twenty years ago, Monterey County had just a few hundred acres of vines. Today the total is 34,000 acres, of which 8,000 are non-bearing (grapevines do not bear fruit until at least the third year). That is more acreage than in any other coastal county in California. And nearly all the vines are premium varieties—Cabernet Sauvignon, Pinot Noir, White Riesling and the like.

The Salinas Valley might never have become a wine region if San José hadn't grown so fast. In the late 1950s several wineries in the San José area acknowledged the inevitable and began searching for suitable vineyard land far from the madding suburban sprawl. They discovered a University of California at Davis report showing that the Salinas Valley matched the Napa and Sonoma Valleys in total available heat during the growing season. Test plantings produced such superlative results that all went ahead with large-scale plantings. In 1966, the year of the first commercial crush for the new vineyards, the Salinas Valley was toasted as "the world's first fine wine district established as a direct result of scientific temperature research."

A more unlikely fine wine district is hard to imagine. Known as the "salad bowl of America" for its lettuce and green vegetables, the table-flat Salinas Valley stretches south from Monterey Bay for more than 50 miles. The Valley towns are quiet and almost Mexican in feeling—at times you imagine that this is northern Mexico rather than central California. To the west, the ramparts of the Santa Lucia Range rise abruptly more than 3,000 feet, blocking the moist Pacific storms and making the Valley "too dry" for grapevines—the average annual rainfall of 10 inches is half what the vines need. Irrigation, rare in coastal wine-growing regions, is universal here. Muscular live oaks fringe the crest of the Santa Lucias, a sharp contrast to the lush redwoods lining the hills around the Napa Valley. And each afternoon a strong wind blows down the Valley from Monterey Bay, keeping the temperatures down.

Wine touring is also still something of a pioneer experience in the Salinas Valley. In place of the bumper-to-bumper traffic of Napa's Route 29, you will have the back roads of the Valley to yourself, no matter which season you choose to visit. The crush (September to November) is the time of the most action in wineries, and smaller wineries may be very busy. Spring is easily the most beautiful season, especially after a wet winter like 1977-78, when all of rural California was covered by the purple of lupine and yellow-gold of poppies. You will also probably not stay in the Valley but base yourself out of the Monterey Peninsula, about 20 miles from Salinas.

If you are based on the Peninsula, start your wine touring day by heading south on the Monterey-Salinas Highway (State Route 68). Your first stop should be the **Monterey Peninsula Winery**, 2999 Monterey-Salinas Highway, just outside of Monterey.

"We don't want to have any ordinary wines," wine maker Roy Thomas told me recently, as I tasted six different Zinfandels included in the winery's current offering; "we want them all to have a personality." Each wine did have its own personality, reflecting Thomas' wine-making philosophy.

Tours are as informal as the tasting room, which is wedged into one corner of the wine cellar between barrels of aging Cabernet Sauvignon and Chardonnay. If the tasting room is not too busy (it does well on weekends), a staff member will take you around. But if they are tied up, you can "do" the

tiny winery by yourself in short order. They are open daily to visitors from 10 A.M. until 7-7:30.

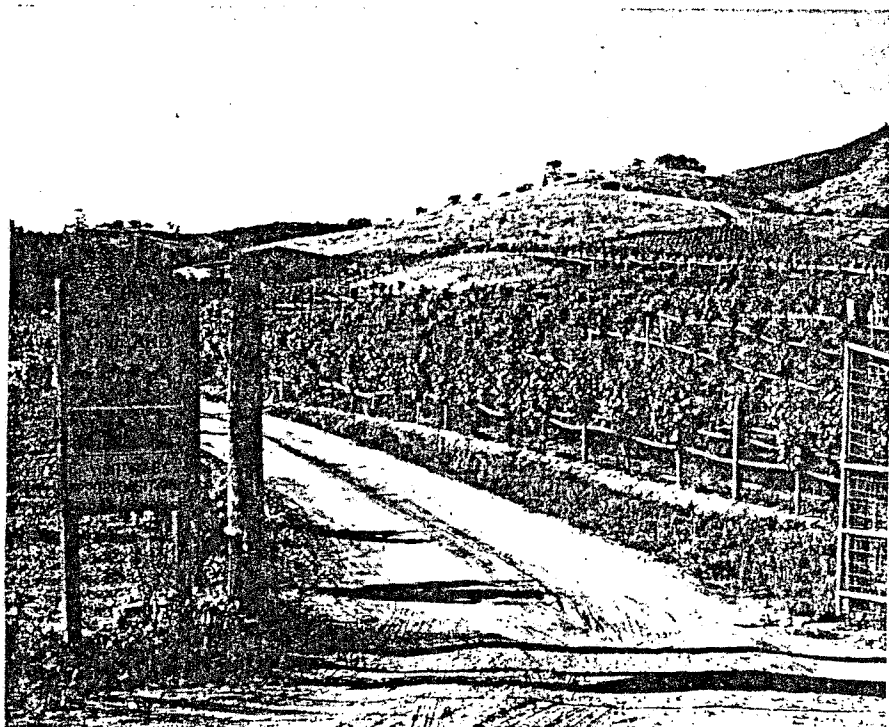
From the Monterey Peninsula Winery, continue on Route 68 to Route 101 in Salinas. Take 101 south to Gonzales, to the large modern **Monterey Vineyard**, where wine master Dr. Richard Peterson presides.

Peterson, formerly wine maker with Beaulieu in the Napa Valley, is an experimentalist. Listening to him talk, you understand why he left the relative security of the Napa Valley for the viticultural unknown of the Salinas Valley. "We are definitely pioneers here," he says, referring to all the growers and wine makers involved with the county; "but it is much more fun than living in an area where everything is known."

Peterson feels that the Salinas Valley will become famed for its Pinot Noir because of the area's cool climate, the coolest in California and different from other coastal areas. "We get a long, cool season in Monterey," Peterson told me. Instead of hot summer temperatures and a progressively cooler fall characteristic of coastal wine-growing regions, the Salinas Valley is cool all summer. "We think Pinot Noir, more than any other fine wine grape, requires a cool summertime climate to achieve perfection," Peterson says. White Riesling and Gewurztraminer, two German-style white wine grapes which do best in cool weather, have also produced superlative wines in the Salinas Valley.

White Riesling—and other grapes in Monterey County—develop *Botrytis cinerea*, the "noble mold" responsible

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PHOTOGRAPHED BY RICHARD ALBERT, JR.

Salinas Valley continued from page W16b

for the great Sauternes of France and the *Trockenbeerenauslese* of Germany. Before 1970 *Botrytis* was not thought to occur naturally in California, due to the dry climate. But in 1972 White Rieslings in various parts of the state, including the Salinas Valley, were *Botrytis* affected; since then it has appeared on a regular basis, particularly in the Salinas Valley. "In twenty vintages, I haven't seen nearly as much *Botrytis* anywhere else in California as occurs commonly every year in upper Monterey," Peterson says.

Tours and tasting are offered at the Monterey Vineyard from 10 to 5 daily. When on the tour, note the pallets under the barrels (Peterson's own invention) and the gap between the wall of one building and the floor of the next. The unusual design is earthquake protection, as the area is one of the most seismically active in the United States.

If you have written ahead for an appointment, you can visit **Chalone Vineyards**. Located in the shadow of the strange rock formations of The Pinnacles, 2,000 feet above the valley floor, Chalone is the home of some of California's finest Burgundy-style wines.

To get to Chalone from the Monterey Vineyard, take the freeway (US 101) south to Soledad. From Soledad, take State Route 146 east, following the signs toward Pinnacles National Monument. Just out of town you pass the giant **Paul Masson Winery**, which is strictly a production facility offering no tours. As you follow the narrow road up the canyon to the winery, past buck-eye trees and sagebrush, you will feel that you, too, are participating in wine pioneering in California.

Vines have been at Chalone for years; legend has it that a Frenchman was looking for the limestone soil that Chardonnay and Pinot Noir love, and here he found it. The vineyard was resurrected in 1960; then six years later Richard Graff arrived and did more than anyone else to create Chalone's current renown. The present winery building, built in 1974, is a model facility, air-conditioned throughout, with modern equipment on the main level. Descend to the cellar via the circular stairway, however, and you are back in the land of tradition. The ripe smell of black mold on the ceiling of the cellar sets the tone, which is carried out by the rows of small European oak barrels, the contents of which will make your mouth water if you have ever tasted Chalone wines. It is hard to believe that this cellar is only four years old.

To arrange a visit to Chalone, write to Peter Watson-Graff—the current wine maker—Chalone Vineyards, Stonewall Canyon Road, the Pinnacles, Soledad, Calif. 93960.

From Soledad you can return to Monterey via Routes 101 and 68, or you could head south to Greenfield and return via back roads. One pilgrimage route for wine lovers is County Road G-16 (West Elm Avenue). Take it west from Greenfield until it bends at the

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foot of the mountains. The vineyard on your right is the **Wente Brothers' Arroyo Seco Vineyard**, home of the Wente Brothers White Rieslings and Gewurztraminers. These wines were among the first to establish the Valley's reputation as a fine area for German-style wines. *Botrytis* visits this vineyard on a regular basis.

Just beyond the Wente Vineyard, G-16 intersects Arroyo Seco Road (County Road G-17), which you can follow north to Soledad, passing the ruins of **Mission Soledad** and some of the vast new plantings, including those of **Mirassou** (site of more fine White Riesling and Gewurztraminer) and the **Ventana Vineyards**, a new winery which is still a-building and will handle its first crush this fall. Tours and tasting are not offered now but may be by next year.

For a beautiful return route to the Monterey Peninsula, stay on G-16 instead of turning on to G-17. G-16 twists its way through the Carmel Valley, the site of one new small wine estate, **Durney Vineyards**. Although tours and tasting are not available on a regular basis yet, special groups may be able to tour the winery by writing ahead (Durney Vineyards, Star Route Box 152, Rancho del Sueno, Carmel Valley, Calif. 93924).

Monterey County may lack the established feeling of the Napa Valley, but the experience of touring the Salinas Valley offers its own rewards. It is not every day that you get the chance to witness the birth of an important wine area. ■

Where to Stay

Staying in a motel in Soledad is not quite like staying in a half-timered inn along the Rhine. The wine towns of the Salinas Valley are not without interest, but wine tourists will probably prefer to base themselves on the Monterey Peninsula. The extra 40 miles driving (round trip) are balanced by staying in one of California's finest coastal regions.

Monterey is the "big town" and offers a sea of standard-to-deluxe motels. Among many others, **Travelodge**, with two motels (one at the Fairgrounds, 2030 Fremont Street, Monterey, 408-373-3381, \$32-\$37 for two; one at 675 Munras Street, Monterey, 408-373-1876, \$34-\$37 for two); **Holiday Inn** (2600 Sand Dunes Drive, Monterey, 408-394-3321, \$50.50 for two) and **Hilton Inn** (1000 Aguajito Road, Monterey, 408-373-6141, \$38-\$55 for two); are represented.

But for anyone who doesn't mind walking down the hall to a shared bathroom, Carmel with its guest lodges offers—to me, at least—a finer vacation base. "Old" Carmel is truffled with these converted houses, of which two representative examples are **Stonehouse Guest Lodge** (8th below Monte Verde, Carmel, 408-624-4569, about \$24-\$28 for two) and **Holiday Guest House** (Camino Real and 7th, Carmel, 408-624-6267, about \$20 for two). Hotels

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Paicines--Giant of The New Vineyards

Henry Schacht

PAICINES IN THE FOOTHILLS of the Gavilan Range south of Hollister is little more than an old-fashioned general store. A country crossroads where a tribe of Indians, the Paicines, once lived on the borders of a soggy meadow.

Where the squaws hunted grasshoppers and gathered acorns, and where later settlers herded cattle, is today the center of the world's largest vineyard of fine wine grapes.

This is the astonishing Paicines vineyard of Almaden Vineyards, Inc., with headquarters at Los Gatos. Founder Charles LeFranc planted the first European grape varieties in Santa Clara county back in 1853.

Under the pressures of urbanization Almaden has now sold its original vineyards down to 55 acres around the winery. For the future it looks to other outlying plantings and especially to the monster Paicines operation where 1.3 million vines of 19 varieties have been planted.

Planting is still going on in and near 3500-acre Paicines. But already this foothill vineyard has more of the great Pinot Chardonnay grape than the entire Chablis district of France, far more vines of the Johannisberg Riesling than flourish on the stony terraces of Schloss Johannisberg, more Grenache than the French district of Tavel noted for its rose.

* * *

PAICINES is the largest single contributor to the growing volumes of fine wine grapes being produced in the "new frontier" of San Benito and Monterey counties. Far better known in the past for livestock, tree fruits and vegetables, these counties will play a most important role in satisfying the future demand for California table wines.

Some wine has been produced in San Benito county since the Franciscans planted grapes at Mission San Juan Bautista. Only within the past five years, however, has development of Paicines Vineyard made it a major wine district.

Visitors are usually surprised that the climate is so cool, seldom going over the 80s even on summer days, and quickly losing its heat after sundown. The daily average for the summer is about the same as in the heart of the Moselle region, slightly cooler than in the Champagne, and definitely cooler than Burgundy and Bordeaux.

The factors of coolness and variety seem to hold more importance in the opinion of wine experts these days than soil. On both of these factors Paicines ranks with the best regions.

* * *

TO ASSURE the needed 24 inches of annual moisture to these sprawling vineyards is a project of exceeding proportions, not to mention expense. Nature can usually be counted upon to supply 2 to 13 inches. The rest comes from deep wells which feed 20 miles of underground water mains. It is dispensed through 60,000 sprinkler heads mounted on portable aluminum pipe.

Even this will soon be improved by establishment of a permanent sprinkler system. A plastic pipeline will be buried every 60 feet. Manager Louie Spadafore figures he will need 100 miles of pipe for every 1000 acres.

Louie has other things to worry about, too, such as planting more vineyard. Since January of this year more than 400,000 plants have been placed and staked on 850 acres.

Storing and aging the wines from such a vast operation requires capacity for 1 million gallons of white wines at Paicines and at nearby Cienega Vineyard, where the Almaden reds are fermented, the cellars already hold more than 10,000 small oak casks. Plans are to triple that in the future.

We knew it was big before we saw it but Paicines is more than that. It is staggering.

Farm Reporter

The Deer and The Grapes

Henry Schacht

IF THE DEER come down at night to nibble on your suburban garden, take solace from the plight of Louie Spadafore.

Manager of the giant Paicines Vineyard in San Benito county, he has his deer troubles, too. This southern extension of the Los Gatos-based Almaden Vineyards, Inc., nestles against a range of steep hills that provide perfect deer cover.

To protect its thousands of acres of vines Spadafore has been forced to throw up 15 miles of nine-foot deer fence. The tab is \$2000 per mile. But without it the deer come out of their hills by the scores to nibble at the tender young shoots.

This is only one of the production problems faced by the vintners, including Paul Masson, E. Mirassou, Wente Brothers, as well as Almaden, who have taken up new land in San Benito and Monterey counties.

Recently we toured the Soledad district with Jack Fariol who runs Masson's 1000-acre Pinnacle Vineyard, and with Pete and Steve Mirassou who manage the twin Mirassou vineyards in the same area.

We bumped to the top of a knoll in Fariol's pickup to look down over the full stretch of the vines now sending out their first new growth. Spaced across the vineyard were strings of portable sprinklers laying down glistening arcs of water.

Portable sprinkling is the rule in these vineyards. Irrigation is an essential. It is also a major expense, and mistakes in this end of the operation can not only cost dollars directly but indirectly as well through lower grape production.

* * *

PINNACLE'S 14 VARIETIES of fine wine grapes, planted at a rate of 450-600 vines to the acre, are watered from wells, the draw being about 100 feet. When we were there nature had dropped only six inches of rain and the mature vines will need annually 20 to 24 inches.

Consequently the crews were hard at work. The water runs through 28,000 feet of buried permanent pipe to the risers that feed the portable aluminum pipe and the sprinkler heads. Fifteen lines are spewing water at a time. Each line stretches for 1500 feet. In a day the crews will walk five miles unhooking the pipe, lifting it over the wired vineyard rows, resetting it.

Mirassou looks to get away from this labor cost by making the sprinkler systems permanent. On their Mission Ranch the pipe runs over the vines. Great sheets of water were being thrown up into the breeze. Rainbows hovered in the rainy clouds above the vines. All Pete Mirassou has to do to irrigate any part of the vineyard is to turn the faucet.

The other Mirassou vineyard will eventually go entirely to a permanent system. Paicines also plans this. Pinnacle is experimenting with it. At the Mission Vineyard 10,000 feet of pipe serves the vines.

* * *

FARTHER SOUTH at Arroyo Seco where the Wente Brothers from Livermore plan a 300-acre vineyard, wild boar have come down from the nearby hills to luxuriate in the muddy soil, scratch their backs on the stakes, and break down the vines. This lovely spot also backs up to the hills where the waiting deer can see all that good eating down below.

Local climate and soil present their own peculiar conditions. The same cooling wind that makes the district good for fine wine production may also be a problem when it reaches its heavier moods. It is expected that the staked and wired vines will stand up to it and adjust to it. But it is drying and thus increases the need for irrigation. And will its cool blast encourage mildew?

These are some of the mundane day-to-day problems involved in making an investment running into the millions come to full fruition in this new southern frontier of the emium grape.

Farm Reporter

New Frontier of Wine Production

Henry Schacht

WILL THE NAMES of Paicines and Soledad and Gilroy someday have the same familiar ring to lovers of fine wine that now attaches to the familiar St. Helena, Sonoma, Livermore, Saratoga, or Los Gatos?

Some of the California wine industry's best people are convinced that they will. So convinced that they have invested millions in the "new frontier" of our fine table wine production.

The past week took us down to look over thousands of acres of new vineyard planted over the past few years in Monterey and San Benito counties.

Growing urbanization and the rising curve of land values and taxes undoubtedly have influenced the southward movement. But the vintners point out also the growing demand for the best California table wines and the need for new vineyards to meet future requirements.

Fortunately they are not settling for second best in this new area. They had the long-term studies of the University of California to assure them that San Benito and Monterey counties could supply the sunny but cool conditions that exemplify the fine wine regions. When the time came this research provided information that allowed the industry to avoid long and expensive experimentation in searching for the new district.

* * *

PAUL MASSON had already gone southward to the tip of the Santa Clara Valley with its 330-acre San Ysidro Vineyard planted in 1948. San Martin is now planting right next door. But the big move by Masson and Mirassou in the Salinas Valley near Soledad, and by Almaden with its huge vineyards around Paicines, has come only very recently. Most of this acreage is not yet in bearing.

The investment necessary before a single grape comes back to the planter is clear in Masson's estimate that it cost \$2 million to establish the more than 400,000 vines on the 1000-acre Pinnacle vineyard near Soledad.

Mirassou has another thousand acres in two ranches nearby and a bit to the south at Arroyo Seco the Wente Brothers from Livermore Valley have planted 125 of a eventual 300-acre vineyard.

Over the hills at Cienega and Paicines Almaden Vineyards have better than 3800 acres that are a story in themselves.

* * *

THIS WILLINGNESS to bet millions on soil, water supply and climate reflects these insiders' optimism about the future of California table wines. The new plantings are rich with the proudest names among grape varieties.

Pinot Chardonnay, Pinot Noir, Johannisberg Riesling, Cabernet Sauvignon, Gamay Beaujolais, Folle Blanche, Chenin Blanc, Gewurztraminer — the names that have come from the finest chateaux of Europe — are planted alongside brand new varieties created especially for our industry by the University of California — Emerald Riesling, Ruby Cabernet, and Flora. Almaden alone has planted more of the classic Cabernet Sauvignon than any chateau in the Bordeaux region.

All of this has been done here because the area qualifies as Region One and Region Two, the University of California classification based on daily temperatures, which means the best for fine table wines and champagnes. Soledad and Paicines, a thousand miles farther south than Bordeaux and Burgundy, are actually cooler.

Where the pastures, the potatoes and the lettuce once grew, an entire new vineyard industry is growing in ever shade from infancy to young maturity.

Monterey vintners can fool Mother Nature

Like any other farmers, wine grape growers from Monterey County, Calif., are prone to say, "You can't fool around with Mother Nature." But then they go on to explain how they're tricking Mother Nature, countermanding Mother Nature, using only what they choose of Mother Nature, and just plain pulling the wool over Mother Nature's eyes.

It's a fascinating story, and each spring I enjoy hearing more about it when the Monterey Winegrowers Council throws a tasting and luncheon for New England wine writers. Best of all, they illustrate what they're talking about with new releases of their intense, full-bodied wines.

The audacity of it all is stunning. For thousands of years, vintners have watched the weather anxiously and, in the end, taken what they got. That's why you see so many vintage charts around. In a bad year, the enologist's skill is more crucial; in a good year, it's a whole lot easier.

More than almost anywhere else, Monterey vintners like to think that the wine is made in the vineyards.

MOST OF this bamboozling of Mother Nature has to do with irrigation. The average rainfall in Monterey County is 9

to 10 inches a year — which classifies it as a desert.

So Monterey as a wine region scarcely existed until people came with the technology and capital to irrigate. But in the last decade, vineyard acreage has grown tenfold to 31,632 — more than Sonoma (27,215 acres) or Napa (25,353) and second only to the San Joaquin Valley.

Jerome J. Lohr of Turgeon & Lohr Winery, Peter Mirassou and William Jekel of Jekel Vineyard gave a rundown on some Monterey facts:

- It is the coolest wine region, with the longest growing season. Budding starts early, but harvest is later than most regions, sometimes November, December or (in one extreme case) January of the following year.

Usually, the coolness works to Monterey growers' advantage, because it's felt that grapes develop character in a long growing period. In 1980, however, when Napa and Sonoma growers were congratulating themselves on a cool summer, which allows high acids to develop, Monterey vineyards were having too much of a good thing; quantity was down quite a bit, though quality did not suffer as much.

- Monterey is the windiest wine region. Winds come up about noon, chas-

Your wine

By DONALD D. BREED

ing away the fog. This contributes to coolness, but also keeps the grapes clean — a big plus, since many growers like to harvest mechanically and field-crush.

- Soils are predominantly gravelly loam. Lohr said this is prized in Europe, and it's what initially attracted him to Monterey. Jekel said that gravelly loam, as opposed to silt loam, doesn't hold the water as long. This means the growers can artificially stress their vines to bring out varietal intensity. To put it another way, they can simulate a hillside vineyard on flat land.

This kind of soil has other advantages. The phylloxera louse has not infested the vineyards, and most growers are planting vines on their own roots. And during the winter, such rains as there are purge the soil of irrigation salts.

- Monterey is, as said, dry. This means, as one of the growers said, "We can sleep better at night" during harvest. (Rain at harvest dilutes acids and sugars — it's frequently a disaster.) Vintners can be so confident that the grapes won't get caught by rain that they can pick grapes by acid level, rather than sugar level.

The ability to irrigate has side advantages. On frosty mornings, it protects young buds from harm. And it works the other way. "I can lower the temperature in the vineyard from 106 degrees to 92 degrees," said Terrel West of Arroyo Seco Vineyards.

ALL THESE traits, natural and man-

Over

made, tend to give Monterey wines intense varietal character. Particularly fine are the white wines that traditionally grow in cool parts of Europe: Chardonnay, White Riesling, Gewurztraminer and Sauvignon Blanc for Fume Blanc.

They had great hopes for Pinot Noir. This year, nobody brought any — which may or may not indicate something about quality they've achieved.

Cabernet Sauvignon from Monterey seems to have big color, fine aroma and a surprising softness on the palate. They are very pleasant, but with somewhat less complexity and elegance than Napa and Sonoma Cabernets.

THERE WERE four Chardonnays, all of them magnificent. The most commanding, as so frequently in tastings, was Ventana's 1979, a gold medal winner at Los Angeles County Fair.

Jekel's 1979 was lightest in color and most delicate, but more intense than the average non-Monterey Chardonnay. For just sipping, this would be the most elegant of the four.

Best value (at \$6.50) was Paul Mason's 1978 Second Bottling. Buddy Masuda, assistant winemaker, said a particular plot of grapes was selected as likely to age well. The grapes were held on the vines longer and then the wine was given a full 10 months in Limousin oak. The result is a beautifully balanced wine in which the oak is not at all obtrusive. Only 3,600 cases were made.

Turgeon & Lohr's 1979, not poured at the tasting but at luncheon, had the characteristic Monterey intensity and was great with food. As a sipping wine, there was an overbearing quality, almost

coffee-like as the wine approached room temperature.

THE MISFORTUNE of following the Chardonnays fell to Monterey Vineyard's Pinot Blanc, 1979. It was clean and crisp, with nice enough fruit, but hard to appreciate after the buttery, vanilla, oaky Chardonnays.

When Wente Bros. makes a wine with a hand-written label, it's always very special. That was the case with Wente's 1979 Gewurztraminer, Arroyo Seco, which had a big floral nose and considerable sweetness, but nicely balanced with acid. It lacked the spice or bitterness of a Alsatian Gewurztraminer; it was a fine example of a typical California Gewurz.

Later at lunch, we were treated to another Wente hand-written-label wine, a Riesling.

One of the pleasantest memories of last year's Monterey event was the J. Lohr Riesling. The 1979 version isn't as fragrant or full-bodied. I found a tea-like smell in the nose, probably due to botrytis. But at \$6 it's a most pleasant bottle of wine — and it's 9 percent alcohol, which is nice.

ALMADEN has billed its 1978 Monterey Cabernet Sauvignon as being at least as good as the 1977, which won a gold medal at the Orange County Fair. The nose on the '78 is strong and grassy, like a Bordeaux, but it's soft on the palate and ready to drink. For \$4.75 a bottle you will be very pleased. It's nice to know, too, that you don't have to chase around to find it: about 25,000 cases were produced for national distribution.

Durney Vineyard's Cabernet Sauvignon, 1978, at \$12 was the most expensive wine at the tasting. It had considerable finesse, but not the eye-popping

richness the price demands. I preferred it to the Almaden, but it wasn't 2½ times better.

Jekel's Cabernet Sauvignon (1977 I think) was served at the luncheon, and I liked it best of the three. It also was ready to drink, but it should gain by bottle age.

Mirassou's 1978 Zinfandel from Monterey County was an inky big Zin, but it lacked the raspberry taste that you so often welcome in Zinfandel. More than most Zins, this had a claret quality.

SERVED AS a dessert wine was Monterey Vineyard's Thanksgiving Harvest Riesling, sweet and full of the concentrated flavor that comes from botrytis. It was similar to a nice Auslese.

But nicer than even that was Monterey Peninsula Winery's 1979 Muscat Canelli. Terrel West, who grew the grapes, explained something that was new to me:

I had thought Muscat was a terribly underrated grape, falsely associated with bums drinking out of paper sacks. Actually, there's something to that.

Muscat Alexandria is the one that grows in the Central Valley and which is used to make cheap Muscatel. Muscat Canelli is the one grown in Northern Italy for Asti Spumante. (The Muscat you buy as a table grape is still another variety.)

This wine was very sweet — 6.4 percent residual sugar — but wasn't cloying because of the good acid balance. It had the fragrance and lusciousness you remember from Asti, but in a still wine.

The rest of the good news is that it lists for just \$5.50. The bad news is that they produced just 780 cases.

County takes gold in wine 'Olympics'

3026
It was a very good year for Monterey County wines at the Los Angeles County Fair, the most prestigious wine judging competition in the state.

Thirty-one wines, either made from Monterey County grapes or produced by local wineries, received awards in recently announced results.

Those awards were ten gold medals, nine silver medals, five bronze medals and seven honorable mentions.

Those awards also came against a record number of wine entries in the 45-year history of the fair, 1,367.

There were also a record number of wineries represented, 154, including seven which have wineries or grape acreage in Monterey County.

With those ten gold medals, Monterey County wines and wineries captured 12 percent of all the gold medals (81) awarded in the competition.

While those awards may not have much impact in the long run, except to the most diehard of wine lovers, the golds and silvers do signal an acceptance of Monterey County wines, according to local winemakers.

"The most important thing (about the awards) is the change from a few years ago when Monterey County was taking so much flak" about

being a just a place where vegetables are grown, said Doug Meador of Ventana Vineyards in Soledad. Ventana won two gold medals, while grapes from the vineyard were used by a Santa Cruz winery to produce another gold-medal winner.

"Monterey County Wines are becoming very well accepted," adds Todd Cameron of the Monterey Peninsula Winery, one of the biggest winners at the fair for any winery in the state. Monterey Peninsula Winery carted off five gold medals, two silvers, two bronzes and three honorable mentions. The five gold medals were the second highest number received by any winery in the state.

And Cameron adds that as the years go by, the percentage of Monterey County wines winning awards, and with that acceptance in the wine world, will increase. "It's inescapable... In Chardonnay (grapes) alone, there is more acreage in Monterey County alone than in the rest of the state. Statistically we must eventually come out with more awards. And the quality is there."

Award winners

Following are the wines and wineries which received gold medals:

Monterey Peninsula Winery — 1977 Zinfandel

Willow Creek Late Harvest; 1977 Zinfandel Hilltop Late Harvest; 1978 Malvasia Bianca; 1979 Johannisberg Riesling Late Harvest; 1978 Alicante Bouschet.

Ventana Vineyard — 1978 Chardonnay; 1979 Botrytis Sauvignon Blanc.

The Monterey Vineyard — 1978 Botrytis Sauvignon Blanc.

Turgeon and Lohr Winery — 1978 Reisling.
Ahlgren Winery of Santa Cruz — 1977 Chardonnay, made from Ventana Vineyard-grown grapes.

Other awards:

Monterey Peninsula Winery, California Special Cream Sherry, honorable mention; The Monterey Vineyard, 1977 California Classic Red Special, silver; Mirassou Vineyards, 1978 Cabernet Sauvignon, honorable mention; Mirassou Vineyards, 1977 Petite Sirah, bronze; Monterey Peninsula Winery, 1978 Pinot Noir, honorable mention; Monterey Peninsula Winery, 1977 Barbera, silver;

The Monterey Vineyard, 1978 Rose of Pinot Noir, silver; Monterey Peninsula Winery, 1977 Pinot St. George, bronze; Monterey Peninsula Winery, 1977 Pinot St. George Late Harvest, silver; Taylor California Cellars, dry Chantl Blahq; Monterey Peninsula Winery, 1979 Muscat Canelli Arroyo Seco, bronze; Ventana Vineyards, 1979 Pinot Blanc, silver; Jokol Vineyard, 1978 Chardonnay, silver; Turgeon and Lohr Winery, 1979 Riesling, silver; Taylor California Cellars, Riesling, honorable mention; The Monterey Vineyard, 1979 Soft White Riesling, honorable mention;

The Monterey Vineyard, 1979 Riesling, bronze; Mirassou Vineyards, 1978 Gewürztraminer, bronze; Mirassou Vineyards, 1978 white table wine, honorable mention; Monterey Peninsula Winery, natural plum wine, honorable mention.

VIVA VINO!

BY ROBERT GOERNER

The seventies saw explosive growth in the wine industry and the eighties should be equally exciting, a decade of exploration into new techniques of wine making and wine marketing. During the seventies wine grape acreage tripled in California, unfortunately not in anticipation of the oncoming white wine boom. The unwanted lakes of red wine translated into unwanted columns of red ink in the ledgers and the new wave of blancs de noir was born out of financial necessity. Some growers chose to bud the in-demand white varietals onto the unsaleable reds. The desperate ones, with no other options, sold their wine to brandy distillers. As Edmund Mirassou pointed out, there was enough Cabernet Sauvignon distilled into brandy in 1978 that some bottles would have been eligible to carry the varietal name.

The California wine industry's yearly crush is still $\frac{2}{3}$ red grapes while its sales are $\frac{2}{3}$ white wine. If you drink white this means you pay higher prices than you would care to. Good old supply and demand. Red wine drinkers, on the other hand, have many bargains to choose from. Much well-made Cabernet Sauvignon, Pinot Noir and Zinfandel is being aged beyond the point the wineries would prefer in terms of their cash flow.

The number one topic in the wine trade today is the cost of money. What happens to interest rates will determine the future of wineries who are under-financed. Many changes are in the offing; consolidations, new ownerships, even different patterns of distribution are forecast. Many smaller wineries have been selling directly to the merchants, especially here in the Bay Area where shelf space for new labels is now nearly non-existent. Newcomers' access is being stymied by slow movers that just sit there taking up space.

One solution is to start selling out of the state and then eventually exporting to Europe and Japan, now virtually untapped markets. This may call for label changes to conform to EEC regulations. When Christian Brothers exported their

Chablis to the United Kingdom they renamed it "Crystal Dry." Everyone except us seems to know that Chablis and Burgundy denote wines from specified areas in France. The Italians are equally protective about Chianti and in Germany Johannisberg is not the name of a Riesling but a specific growing area in the Rheingau. The European Economic Community has an 85% rule for varietals, which bars our wines containing less than that percentage, legal as they may be here. Individual countries sometimes impose higher standards. France, for instance, requires that all varietally labeled wines be 100%.

Incidentally, white Burgundies need not be 100% Chardonnay, a frequent misunderstanding. As in much of France, vineyards have been interplanted with varieties whose pedigree was unrecorded. Even today, growers in the Côte d'Or are not too concerned about the varietals. One top winemaker in Meursault has considerable Pinot Blanc planted and it is possible that some of his wines are entirely made from that grape. In Morey-Saint-Denis, the vineyards of Monts-Luissants are said to be entirely Pinot Blanc. If Pinot Blanc is unfamiliar to you now, that could change in the Eighties. I foresee a good future for this grape in California. At the moment it accounts for only one half of one percent of our wine grape acreage but an unusually large portion of this has just recently been planted. Edmund Maudiere, who commutes between Yountville and Epernay to make the Moët & Chandon Champagnes (they call the local product "sparkling wine"), says he plans to use a large portion of Pinot Blanc in future cuvées, depending on availability. The Novitiate of Los Gatos has marketed a reasonably priced 100% varietal worthy of your appraisal and premium wines are arriving from Matanzas Creek, Chateau Saint Jean and Chalone.

Dusting off the crystal decanter and peering into the Eighties I see that Monterey county will come into its

own on a par with Napa and Sonoma. The long-standing battle with the vegetative voodoo that sometimes manifested as an asparagus aroma seems to be won. If these anomalies put you off in the past, give Monterey a second chance. Some of the new wineries are producing stunning bottles: Ventana, Jekel, Durney. Monterey Peninsula Winery carries on as though marketing considerations didn't exist. Their newest listing shows no less than 46 wines with more releases on the way. You may remember them achieving a sort of fame by inviting their friends to celebrate the harvest by foot-stomping a special batch of grapes. This return to tradition horrified the state authorities who felt that modern man cannot survive such primitive practices.

Pricing is getting to be a hot issue. Many quite good new wines are coming on the market unrealistically priced relative to their quality, says Ernie van Asperen, who has bailed out many drowning wineries by buying their excess inventories. Chardonnays that should be selling for \$5 a bottle are going for \$8 or \$9, he says, and he wonders how they get away with it. However, the day of reckoning is fast approaching. That \$12 Chardonnay loses its allure when you find an \$8 bottle that tastes better.

Turning to imports, these trends are forecast for the immediate future. The French clarets will drop off pricewise about 10% but Burgundies will go through the roof. Are you ready for \$50 Bonnes Mares? Germany will hold the line and the reasonably priced Italians will probably increase their 54% share of the import market with only modest price rises. Table wines from Spain are still struggling for recognition here and represent good values.

A portent of things to come could be the new French fad for drinking light weight red wines at a cool 50 degree temperatures. If the California wine industry started a promotion campaign built around young fruity reds, those lakes of unsold wine might be transmuted into columns of profitable figures for the wineries and a new sensory experience for the rest of us. □

✓ 1979 HARVEST IN MONTEREY

HAWAII BEVERAGE GUIDE
February 1980

Grape growers of Monterey County who have been guardedly optimistic throughout the difficult growing season of 1979, are beginning to breathe easier now that most of the crop is in.

After an auspicious beginning, problems started appearing in September when the vines, stressed by a heat wave, stopped developing for an agonizing period immediately afterward. In the cool weather which followed, grape sugars climbed slowly. But finally, with a little more sun, they reached desired levels. Now most of the grapes are safely delivered to wineries, unharmed by the few sprinkles of rain that have fallen recently.

The quality, despite the problems, looks good. The quantity is slightly higher than last year in some varieties; slightly lower in at least one important variety, Chardonnay, according to Terrel West, vineyard manager of Arroyo Seco Vineyards in Greenfield.

Jim Smith of D.M. Farms in Soledad reports "Our crop is 90 percent off the vines now. It matured fairly early so we are in good shape. The tonnage was better than last year, except for the few acres which were grafted over a year ago. Not surprisingly, those vines yielded only a small crop this year."

Though it is too early to predict total tonnage from Monterey's 33,000 acres of vineyards, growers agree that most of the vines are old enough now (the youngest were planted in 1974) so that this year's total can be considered typical of years to come. A 10 to 20 percent increase this year over last just about reflects the proportion of vines reaching maturity this year.

It is indicative of the healthy state of the Monterey wine region that most of the grapes grown there "find a home" in the Monterey wineries or those which are physically located outside of Monterey but own vineyards in the County. Paul Masson, Almaden, Wente Bros., Mirassou and Turgeon and Lohr are examples. Some grapes are contracted for by wineries in other areas. Gallo has contracts for large amounts of Monterey-grown grapes.

Proof of the excellence of the crop is in the wine it produces. White wines of the 1979 vintage will be released by wineries starting in early spring. Most of the red wines will require longer aging in oak and bottle, and will not be available for tasting for two or more years, depending on their development.

wine cellar/ raoul gripenwaldt

Premium wines from Monterey

In the past decade Monterey County has become one of the premium wine-growing areas of the nation.

The first large acreage of wine grapes were planted in 1962. Last season the area produced 100,000 tons of wine grapes from 33,000 acres of vines.

Although modern grape growing procedures first started in the area in 1962, the two missions in Monterey County had vineyards in the 1700s — as did all California Mission. However, the grape was the "Mission" grape, a Spanish variety which did not yield good wine. The wine was used mostly for sacramental purposes.

In 1935 the University of California at Davis began its extensive study of grape growing areas, dividing the state into climatic areas and the types of grapes which would grow best in the areas.

Monterey County was designated as Region I and II, having climatic conditions deemed ideal for growing the early ripening varieties such as Chardonnay, Riesling and Pinot Noir. The weather is similar to that of northern Burgundy, the Champagne District of France and the German Rhine and Moselle regions (Region I).

Region II is ideal for such varietal grapes as Bordeaux (Cabernet) Sauvignon Blanc, Chenin Blanc and Merlot. While all these grapes can be grown in other areas, which range from Regions I through V, they are at their best in Regions I and II.

Monterey County also was blessed with sub-

irrigation and cool ocean fogs to temper what otherwise might be too hot an area.

But it was not until the 1960s that wineries began to take notice of the advantages of Monterey County. Such wineries as Paul Masson, Mirassou and Wente Bros., whose vineyards elsewhere were being throttled by urban sprawl, began planting in Monterey County.

The vintners found that the "virgin" territory was free of infection by the plant louse, phylloxera, which had devastated the vineyards of Europe and California. Many of the present day vineyards are of ungrafted rootstock. (It was found that phylloxera did not attack vines grafted onto American rootstock; consequently, today most European vines are grown on American roots.) Many of Monterey County's vineyards are planted on native European rootstock and continue to be phylloxera free.

When it was discovered that Monterey County was premium wine growing country, the vintners formed the Monterey Winegrowers Council to advise, help market and publicize the area.

Today Monterey County is booming with numerous wineries and vineyards such as Arroyo Seco Farms Co. (making nine premium wines), Arroyo Seco Vineyards, Chalone Vineyards, Cobblestone Vineyards, DM Farms, Durney Vineyards, Hein Ranch Co., Jekel Vineyards, La Estancia Vineyard, Mirassou Vineyards, McFarland Management Co., Monterey Farming Co., Monterey Peninsula Winery, Paul Masson Vineyards, San Martin Winery, Ste. Phillippe Winery, The Monterey Vineyard, Turgeon & Lohr*, Ventana Vineyards and Wente Bros.

The wineries stretch along U.S. Highway 101 from San Lucas in the south to Salinas in the north. Virtually all the vineyards are planted in premium varietal grapes.

Some wineries, such as Mirassou, Wente, Turgeon, Lohr, Almadin and San Martin, have wineries outside of Monterey County, but get their grapes from Monterey County and use the Monterey County name on their label, meaning that 75 percent of the grapes are so grown.

Monterey County's reputation today is such that the rest of the United States, Canada and Japan purchase from Monterey County.

in "old" Carmel include **Pine Inn** (Ocean and Monte Verde, Carmel, 408-624-3851, about \$30-\$50 for two) and **La Playa Hotel** (Camino Real at 8th, Carmel, 408-624-6476; \$35.50-\$37.50 for two people).

Where to Dine

The Peninsula offers great eating. For fish try Monterey's Fisherman's Wharf. Restaurants there include **Rappa's** (elegant, at the end of the Wharf), **Mike's** (ask them which fish is fresh that day), about \$15-\$20 plus wine for two, and **Abalonetti's**, the top spot on the wharf for the past few years, famous for its *calamari* (squid), and always with a line that discourages all but the most dedicated. On Cannery Row is the **Sardine Factory**, praised by many; and in an old adobe building in central Monterey is **Gallitan's**.

Carmel's restaurants seem to fall into two categories: formal/elegant and "quaint." In both categories, continental cuisine and imagination are the rule. Hottest places in town right now are **Charlie O's** and **La Boheme**, facing one another on Dolores near Ocean. La Boheme features a different entrée every night at a *prix fixe* \$7.75 (plus a vegetarian entrée); Charlie O's offers several specials at comparable prices. Both are reputed to be superb, but expect to wait for your dinner; no reservations are taken at either place.

Dolores Street seems to be "interesting restaurant row." Also in the two-block stretch between Ocean and Eighth are the **Tuck Box** and the **Swedish Pancake House**. Both serve breakfast and lunch only, the former in an English half-timbered cottage atmosphere. The latter features great-looking pancakes. On Sundays, many restaurants, including the Pine Inn feature champagne brunches.

Along this same stretch of Dolores is **Nielson's Grocery**, an older store which somehow maintains a small-town feeling in spite of its gourmet food and wine selection. The best selection of Monterey County wines I found was at **Cork and Bottle**, Ocean just above Dolores in Carmel. The Monterey County wines are given their own rack there, a procedure which other stores in the area would do well to imitate.

If you get hungry in the Salinas Valley (you may not always want to pack a picnic lunch of bread and cheese), try the unnamed restaurant next to the Greyhound depot on Soledad Street in Soledad. Look for the "Mariscos" (shellfish) sign. Completely devoid of atmosphere except that provided by the clientele, this place serves excellent seafood in the Mexican/American style. Some knowledge of Spanish might help: the day I ate there (Mother's Day), a mariachi band was playing across the street, and I saw no evidence of any other English-speakers on the block. I have not felt so completely as if I was in Mexico anywhere else in the United States. (About \$7-\$15 for two).

A Monterey County Wine Primer

As Dr. Richard Peterson of The Monterey Vineyard says, "the book is still being written on Monterey County wines." As each vintage matures, and as vines age (older vines traditionally make better wine), wine makers and consumers alike will learn which wines the Salinas Valley and adjoining areas do best. With a little over a decade of wine-making history behind it, the area has already made a niche for itself.

White Riesling was the first Monterey County grape to produce notable wines. **The Wente Brothers' 1969 Arroyo Seco Riesling Spatlese** was one of the best Rieslings in the state at that time but was a mere hint of what was to come. Subsequent vintages of both regular and late-harvest Rieslings have been excellent. In 1977—the best vintage yet in the Salinas Valley, according to several wine makers—the **Monterey Vineyard, Mirassou and Monterey Peninsula Winery** have all joined the Wente Brothers in making fine White Riesling.

Gewurztraminer, the grape of Alsace, produces fine wine in the Valley. Look for the **Wente Brothers Arroyo Seco Gewurztraminer**, as well as **Mirassou's Monterey Gewurztraminer** and **Paul Masson's Pinnacles Gewurztraminer**.

Chardonnay, the great white wine grape of Burgundy (Chablis, Meursault, Montrachet), is making strides in Monterey. **Chalone's** is one of the state's best Chardonnays (try any vintage you can get your hands on); also try the **Mon-**

terey Vineyards 1976 Chardonnay which is very fine, too.

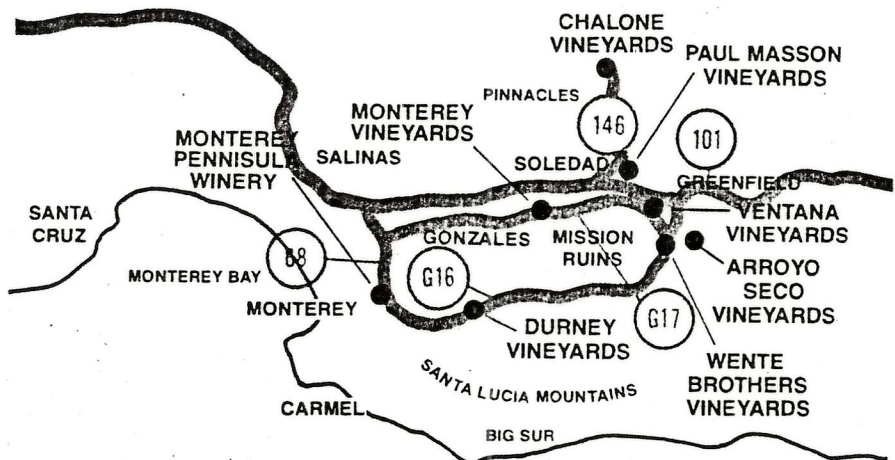
Chalone's Pinot Blanc is better than some wineries' Chardonnay. Its **Chenin Blanc**, made in the big "pseudo-Chardonnay" style, is noteworthy.

Among reds, Pinot Noir is the grape Monterey vintners expect to perform best. To quote from Peterson again, "Monterey is like Burgundy, while Napa is more like Bordeaux." Fine Pinot Noirs have been made already by the **Monterey Vineyard (1974)**, **Monterey Peninsula Winery (1975)** and **Chalone** (many vintages).

Zinfandel may be the big surprise among reds. California's "own" wine, traditionally made in moderately warm areas like northern Sonoma County, Zinfandel ripens beautifully in the cool northern Monterey County, but it may need to hang on the vine until past Thanksgiving. The **Monterey Vineyard's 1974 December Harvest Zinfandel** (picked December 10) is outstanding. The **Monterey Peninsula Winery** has produced several fine "zins" from County grapes.

Cabernet Sauvignon, the grape which made the Napa Valley famous, is also grown in Monterey County. The **Monterey Peninsula Winery's 1975 Monterey County Cabernet Sauvignon** is good, and **Mirassou's 1974 Cabernet Sauvignon** is probably its best yet. Not yet released but worth watching for, from local scuttlebutt, is **Durney Vineyards' 1976 Cabernet Sauvignon**.

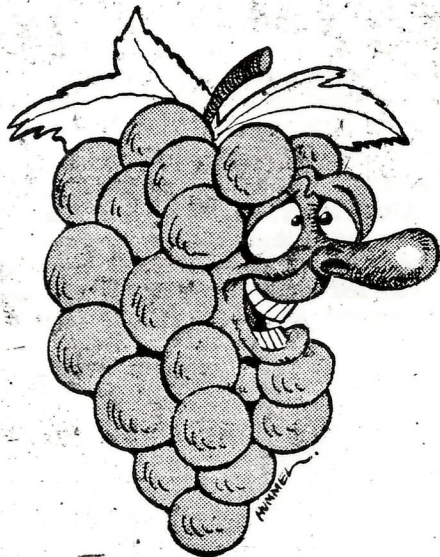
The Salinas Valley



PACIFIC OCEAN

No cliches necessary when describing Monterey wines

IF you'd like to test a wine snob's judgment, ask what he or she thinks of the wines from Monterey County. If he/she responds with adjectives such as "grassy," "herbacious," or "vegetative," you may assume that he/she doesn't know what he/she is talking about and is merely quoting cliches that originate with a few self-impressed writers whose palates need some educating.



Indeed, if he/she offers *any* generalization about the wines of Monterey, he/she will be betraying ignorance. The wines defy generalization. They cover an enormously broad stylistic range. Their differences are far more numerous than their commonalities. Some rather bland wines can be found among them, but also quite a few highly individual wines of extraordinary character and complexity.

Herewith, my opinions on some recent releases

Enjoying Wine

Paul
Gillette



from Monterey. (Not all of the producing wineries are located within the county, but the wines are made from grapes grown there.)

J. LOHR:

1978 CHARDONNAY, \$9 — Varietal character is pronounced and myriad other flavors assert themselves vigorously in this big, buttery wine that was aged for three months in Limousin oak. Winemaker Peter Stern aimed at the style of Corton, the highly-esteemed white Burgundy, and I think he has come very close to scoring a bullseye. The wine should improve for 2-3 years and plateau for 3-4 more.

1977 CABERNET SAUVIGNON, \$7 — Here's a superbiggie that is rich in varietal and other fruit tastes and saw two years' aging in Prarie du Chien oak. Strong fruitiness and tannin promise considerable longevity: the wine should improve for 5-7 years and plateau for 4-6 more. At its peak, it may resemble one of the more highly esteemed wines of the township of St. Julien in Bordeaux.

CHARLES LE FRANC:

1979 MONTEREY FUME BLANC, \$7 — It's 100 percent varietal, bone-dry, crisp, and intensely flavorful. Thanks to its exceptional fruitiness, it may prove to be one of those rare wines that offers something for just about everyone: grape tastes for novices, superb balance and more than a little complexity for traditionalists.

FAIRVIEW FARM:

1979 MERLOT, \$7 — This release, from Fairview's first vintage, invokes images of St. Emilion — and well it should. The wine is 95 percent varietal with 5 percent Zinfandel; varietal character is pronounced, oak is subtle, and balance is superb. Look for 2-3 years' improvement and a year or two more on the plateau.

THE MONTEREY VINEYARD

CLASSIC CALIFORNIA LINE/1979 DRY WHITE, 1979 ROSE, and 1978 RED, each \$3.90 for 750 ml or \$5.99 for 1.5 liters — Here is a trio that should win many, many fans. The white — a blend of 39 percent Pinot Blanc, 28 percent Colombard, 19 percent Chenin



Blanc, and 14 percent Chardonnay — is crisp, clean, bone-dry, and exceptionally well balanced. There's enough fruit for neophytes but more than enough complexity for traditionalists. The rose — 62 percent Grenache, 18 percent Napa Gamay, 13 percent Cabernet Sauvignon, 5 percent Pinot Noir — is fresh, fruity, and a lot of other good things, including full-bodied and elegantly aromatic. It gets my vote as one of the more interesting of many interesting rose wines now being made in California from prime grape varieties. The red — 59 percent Cabernet Sauvignon, 24 percent Zinfandel, 17 percent Pinot Noir — has strong fruit tastes in excellent balance and a promising future. It should improve for 2-4 years and plateau for 3-4 more.

1979 MONTEREY COUNTY RIESLING, \$4.25 — Here is an interesting blend of Riesling siblings (40 percent Franken Riesling, 35 percent Grey Riesling, 25 percent Johannisberg Riesling — that offers freshness and good fruit flavors in harmonious balance with enough sweetness (1.9 percent residual sugar) to

make the wine accessible to neophytes but not enough to turn away veteran oenophiles. A touch of botrytis adds to the complexity.

1979 MONTEREY JOHANNISBERG RIESLING, \$5 — This one offers all the desiderata of the above with the added desideratum of solid varietal character (it's 100 percent varietal). I know of no California Riesling that offers as much *everything* at this price.

1979 MONTEREY SOFT WHITE RIESLING, \$6 — This low-alcohol (10.2 percent) entry gets my vote as the star of the line, offering a veritable symphony of flavors, enhanced by pronounced botrytis tastes, all of which are more than sufficiently assertive to hold up against 4.8 percent residual sugar. The low alcohol enhances the flavor barrage. The wine is 100 percent varietal, its complexity is formidable, and its balance is perfect.

MONTEREY PENINSULA:

1979 MONTEREY CHARDONNAY, \$9.50 — A big wine with solid fruit flavors, it is 100 percent varietal from Arroyo Seco grapes. I find it a bit rough around the edges now, but there's the promise of considerable complexity — and smoothness — some 3 to 6 years hence.

MIRASSOU:

1979 HARVEST SELECTION MONTEREY COUNTY SAUVIGNON BLANC, \$6 — Taste here for a truly distinctive wine, made principally from the Sauvignon Blanc grape, with some Gewurztraminer blended for softening. The wine is bone-dry, subtly aromatic, and impeccably balanced.

1979 HARVEST SELECTION MONTEREY COUNTY CHARDONNAY, \$8 — Ah, here's one to be tasted against the best of them. It's 100 percent varietal, saw some aging in Limousin oak, and offers numerous good fruit and wine tastes in flawless balance. It should improve for 2-4 years and plateau for 2-3 more.

**Wine
Of The Week**

JEKEL VINEYARD 1979 CHARDONNAY, \$9, 100 percent varietal and a product of Arroyo Seco vineyard, makes me want to strike up the nearest band. The wine is big, big, big and glorious in every respect, with pronounced varietal character, superb fruit flavors, flawless balance, and the promise of enough complexity to rival that of Beethoven's Ninth. The wine should improve for 4-6 years and plateau for five more, with annual price appreciation of 20-30 percent.

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Spring Kit
3/31/70

Joe Haughey

CALIFORNIA VINEYARD EXPANSION

New vineyards and new improved grape varieties are key factors in the expansion of the California wine industry, now in its third century of development.

Winegrowers--facing the problems of urban encroachment--are investing millions of dollars in pioneering new wine country frontiers.

Viticulturists and enologists at the University of California (Davis) and Fresno State College have been making long-term studies of climate, soil and water in sections of the State which never have seen a vineyard.

In terms of total California vineyard acreage--456,170 acres bearing--the new plantings are modest. In terms of producing greater quantities of choice wine varieties, each new acre is a hope and a promise.

The result of the cooperative effort between vintners and scientists has been the opening of new vineyard areas, including the San Benito-Monterey complex with nearly 12 thousand acres, and added new acreages in Sonoma, Alameda, Napa, Mendocino, Stanislaus, Merced, Mariposa, Fresno, Santa Barbara and Riverside counties.

One of the most important developments in the seeking of new wine country is in the upper Salinas Valley region (San Benito-Monterey)--flanked by the wildly beautiful Santa Lucia Mountains to the West and the rugged Gavilan mountain range to the East.

Where cattle once roamed, and where potatoes, lettuce, pink beans and artichokes once grew, there are new plantings of Pinot Chardonnay, Pinot Noir, Johannisberg Riesling, Cabernet Sauvignon, Gamay Beaujolais, Folle Blanche, Chenin

(more)

Blanc and Gewurztraminer, plus the newest varieties, so distinctly Californian-- Ruby Cabernet, Emerald Riesling and Flora.

Paicines and La Cienega--in the foothills of the Gavilan range near San Juan Bautista--are dramatic examples of the creation of a completely new wine district. About 135 miles south of San Francisco (near Hollister) there now are some 5,700 acres planted to 26 varieties of grapes.

The soil around Paicines and Soledad is coarse and gravelly, intermixed with chipped granite. Where Paicines squaws once hunted grasshoppers and gathered acorns, now stand lush vines bearing the proudest names among the world's great grape varieties.

Another new area in the Salinas Valley is the 2,500 acres Pinnacles vineyard near the Pinnacles National Monument with its 14,000 volcanic cliffs, crags, spires and caves.

Other dramatic new vineyards in the San Benito-Monterey area include Arroyo Seco (near Greenfield), land of the wild boar, 300 acres, two vineyards near Soledad, 500 acres (San Vicente Ranch), and 300 acres (Mission Ranch), King City Ranch (near Wild Horse Canyon), 1,000 acres, and the San Lucas Ranch (near King City), 1,400 acres.

Another interesting development is the projected planting of vineyards on nearly a thousand acres of San Francisco City and County land, in Sunol and San Antonio Valley, Alameda County--to be devoted to Cabernet Sauvignon, Gamay Beaujolais and Pinot Noir in the reds and Chardonnay, White Riesling and Sauvignon Blanc in the whites.

In other North Coastal areas meaningful new plantings and replantings also have occurred in recent years. Sonoma County areas involve Sebastopol to Forestville along the Russian River, the apple country around Sonoma, Cloverdale (northeast of Healdsburg) Geyserville, Santa Rosa, Knight's Valley and Alexander Valley.

In Napa County new plantings are being made in the Carneros districts, Wooden Valley, Chiles Valley, Pope Valley and on the old Rockinar Dairy farm near Napa.

In Mendocino County, the McDowell Valley near Hopland, Anderson Valley along the Navarro River, small valleys around Comptche (near Navarro) and Branscomb, west of Laytonville, are deemed worthy of new plantings.

Wine was made in Mariposa County, in the foothills of the Sierra Nevada Mountains, during the gold-mining days of California. Some vineyards, abandoned when the miners moved out, are now being reactivated.

Extensive plantings of new and improved varieties are being made in Merced County's warm northern sector.

In Southern California, where urban encroachment and smog are acute problems, about 460 acres have been planted in Riverside County, where the potential is about 3,000 to 4,000 acres.

At Tepusquet, east of Santa Maria in Santa Barbara County, 3,000 acres on rolling hills overlooking the Sisquoc River and with favorable sea breezes, offer excellent prospects for table wine varieties needed to supply the growing demand.

The search for more lands, suitable for particular varieties--involving scientific studies of California's diversified climate and soil--and the development of new grape varieties to meet new conditions--should assure the California wine industry of a Bonanza in its third century in producing distinctive wines in volume enough to meet an ever-increasing national demand.

WINE AND SPIRITS BY FRED RUSSELL

MONTEREY COUNTY EMERGES AS A FINE WINE CENTER

CARL CANNON, noted wine-oriented financial writer for the Los Angeles Times, summed up the Monterey wine situation very concisely in an article written a little over a year ago:

"John Steinbeck's country is undergoing a quiet revolution. Although it has been building for several years and is just now beginning to erupt, not even the posh restaurants and hotels that rim Monterey Bay appear to be fully aware of it.

"While tourists are being packed into sardine factories and arguments rage over the 'plastication' of Cannery Row, a few miles inland something of possibly greater importance is happening.

"Here, seemingly endless rows of grapes are slowly maturing . . . enough to make Monterey County the largest premium wine grape growing area in the United States. Monterey is on the verge of an explosion that will loose an ocean of wine onto the national market and at the same time may radically change the traditional picture of the billion-dollar California wine industry.

"It's happened swiftly. From 2200 acres in 1970, Monterey County now boasts of nearly 40,000 acres of varietal wine grapes—that's more than Napa and Sonoma combined. With this new acreage California is coming close to matching the total of France's great Bordeaux and Burgundy regions."

NOW fine wines have an almost universal appeal. But, in reality, the grapes from which these wines are produced come from only a very few places where nature has endowed the land with just the right combination of soil, sun, climate and rain. Some such places are legend—Burgundy, Bordeaux, Champagne, and Northern Italy.

Such a favored place, too, is the coastal district of Northern California. One area, the Salinas Valley in Monterey County, is the latest to be developed and seems destined to become among the most important in the wine world.

The Franciscan Fathers planted wine grapes in this area during the colorful

mission period of the 18th century. But they were not the fine *Vitis Vinifera* varietals. Certain French varieties were planted in the 1880s in Monterey County by a French man who gambled on a hunch that the soil was like that of his homeland.

In 1919, Chalone established the smallest of vineyards in the limestone soils above the Salinas Valley floor. California farmers, however, had other plans for the valley and virtually ignored the planting of wine grapes until quite far along in the development of the California wine industry. During the past decade, however, the Monterey County area has emerged as a major wine producing district with almost surprising speed.

THIS actually came about in a rather complex, though logical way. It was in 1935 that noted wine scientists Maynard Amerine and A. J. Winkler began their now famous study of California climates. In a nutshell, their research proposed that Monterey County contained areas where the climate would be ideal for the growing of fine wine grapes . . . not too hot, but sunny.

The Salinas Valley is certainly just that. Cool afternoon breezes from Monterey Bay funnel down the long valley, cooling the air and lowering the temperatures to optimum ranges.

The soil is also ideal; light, granitic and well-drained. True, there was not enough rain, but dams were built to hold the winter rains in reserve, and the Salinas River was thus controlled, opening the way to "controlled" rainfall of overhead sprinkling. Each grape variety could receive the exact amount of rain needed . . . no more, no less.

Initially, little attention was paid to these studies. It wasn't until the early 1960s that Mirassou and Paul Masson, concerned with encroaching urbanization in Santa Clara, dusted off the Amerine-Winkler findings, investigated and then planted in Monterey County.

In 1962, working together, Masson planted 1000 acres and Mirassou 300 adjacent to each other near Soledad. In

1963 Wente Bros. entered Monterey to supplement its acreage in Livermore. The first vintages emerged in 1966, proving that Winkler and Amerine were right.

THESE were the trailblazer plantings which began the phenomenal influx of fine wine grapes in the county. From the 1600 acres in the mid-1960s, Monterey County now boasts some 40,000 acres of vineyards, all in top varietal grapes such as Cabernet Sauvignon, Pinot Noir, Gamay Beaujolais, Petite Sirah and Zinfandel in the reds, and Chardonnay, Riesling, Chenin Blanc and Gewurztraminer in the whites. These plantings spread on both sides of Highway 101 from Chualar, Gonzalez and Soledad in the north to Greenfield, King City and San Lucas in the south.

Many new viticultural organizations joined the winemaking pioneers to add to the bountiful vitality of Monterey wines. The Monterey Farming Corp. has over 3000 acres split between Greenfield and King City. The Monterey Vineyard, in selected parcels stretching from Gonzalez to Soledad, has planted 9600 acres around a major new winery at Gonzalez, virtually reconstituting the Teodoro Gonzalez Land Grant of 1836.

San Martin Vineyards now account for 1650 acres in the historic San Bernabe property near King City. Vina Monterey now farms 6400 acres of prime varietals nearby. International Vineyards, the western arm of the largest New York state winery, has its 1400 acres divided between Chualar and Greenfield, while December-Pacific boasts 2300 acres along the Arroyo Seco River from Soledad to Greenfield.

Smaller vineyard operations include Arroyo Seco, Greenfield Vineyards (J. Lohr Wines), Junction Viticulture, Jekel Vineyards, Durney Vineyards in the Carmel Valley, and Chalone, above the Salinas Valley in the Gavilan Range foothills.

With many new Monterey County vineyards continuously coming into maturity, new wines bearing that appellation are showing up in the marketplace. These include new varietals from established brands, as well as new brands, adding to the diversity of this unique, fine wine district.

The Monterey appellation of origin is certainly one to look out for. Anyone who has tasted Mirassou's Monterey Harvest or Limited Bottling wines, the remarkable Johannisberg Riesling Spatlese from Wente's Arroyo Seco vineyards or the superb Pinot Noir, Pinot Blanc, Chenin Blanc, and Chardonnay made in the Burgundian style at the tiny Chalone vineyard in the Gavilan Mountains, knows that Monterey is capable of producing wines that are like no others. ♦

10/76

County vintners put best bottlings to test

By TOM WATSON

Californian Staff Writer
MONTEREY — The scene could only be described as a wine taster's version of heaven.

The tables at the Doubletree Inn were set for about 75 persons.

Each placesetting was made up of 10 long-stemmed wine glasses and a wine guide. The elegant containers would soon be filled with 10 wines from 10 Monterey County wineries for formal taste-testing.

The representatives, which included some of the top names in the Monterey County wine industry, had a common comment throughout the evening: The reputation of Monterey County wines will continue to grow, and the local wine industry will continue to expand.

In the back of the room there were 10 more Monterey County wines for informal testing later in the evening.

On one side of the room there was a table, filled with cheese, bread and fruit, all to cleanse the palates of the taste-testers.

On the other side, the wine bottles were being uncorked and examined.

The occasion was a wine tasting for members and guests of the Monterey Peninsula Chapter of the Brotherhood of the Knights of the Vine, an organization composed of people interested in wines and winemaking. The



Labels from Monterey County vineyards represented at wine tasting

Photo By Richard Green

tasting, as chapter commander David Armanasco of Durney Vineyards explained, was simply to acquaint local wine lovers with the products of Monterey County vineyards.

This year's taste-testing was the second the Brotherhood has sponsored in conjunction with the Winegrowers, Armanasco said. Representatives from 10 Monterey County wineries were selected, and each was asked to bring two of their better wines.

The representatives were also members of the Monterey County Winegrowers Council,

which helped stage the wine tasting in conjunction with the Brotherhood. Monterey Council of Winegrowers is the promotional arm of the Monterey County wine industry.

Vineyard representatives each gave a short presentation on the wine selected for the evening's tasting and the operation of their winery.

The representatives, which included some of the top names in the Monterey County wine industry, had a common comment throughout the evening: The reputation of Monterey County wines will continue to grow, and the local wine

industry will continue to expand.

But then it was on to the main event — the tasting.

Here are brief descriptions of the 10 wines formally tasted — just 10 examples of the fine wines currently being produced in the county.

THE WHITES

Wente Brothers Pinot Blanc 1978: A crisp wine extremely pleasing to the taste buds. The Pinot Blanc grape is well suited to the cooler regions of Monterey County. The grapes for this vintage came from the Arroyo Seco area.

Paul Masson Vineyards Chardonnay 1978: A flavor-intense wine, it is rich and full-bodied. Aged in 60-gallon Limousin oak barrels, the wine was cold-fermented and has long bottle aging potential.

The Monterey Vineyard Gewurztraminer 1978: A wine with 1.95 percent residual sugar, it also has a delightful aroma and floats over the palate. The grapes for this wine came from the northern part of the valley, where the Gewurztraminer grapes produce an intensely spicy wine because of the cooler weather.

Ventana Vineyard 1979 White Riesling: A light wine which contains some carbon dioxide, giving it a slight bubbly sensation. Bottled in March, it should continue to improve over the next 18-24 months.

Jekel Vineyard 1979 Johannisberg Riesling: Cold fermentation and short aging has produced a very fruity wine with an intense bouquet. This is only the second vintage year for Jekel Vineyard.

THE REDS

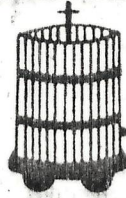
Turgeon & Lohr Winery 1979 Monterey Gamay: A wine with a hint of spiciness, it was served lightly chilled to bring out the full flavor. This wine was produced from a blend of two lots of Monterey-grown Gamay grapes.

Mirrasou Vineyards 1978 Monterey Zinfandel: A rich, unfiltered wine, it will continue to develop with age. The grapes were machine harvested and field crushed.

Almaden Vineyards Monterey 1978 Cabernet Sauvignon: The successor to the award-winning 1977 Cabernet Sauvignon, this wine is exceedingly fragrant and very rich. This wine has not yet been released to the public.

Durney Vineyard Cabernet Sauvignon 1977: Very ripe and very full, this wine was rough-filtered and bottled in early August. This is an estate bottling, as with all of the Durney wines, with all grapes grown on 92 acres in the upper Carmel Valley.

Monterey Peninsula Winery 1977 Cabernet Sauvignon: Already the winner of one gold medal, this is another example of fine Cabernets produced in Monterey County. It is dark and rich and very dry.



wine words. ©

by Ken & Jeanne Bartlett

Monterey Wine Growers

With some twenty years of wine production in the Monterey county area behind them the vintners are continuing to prove that this section is one of California's premium winemaking regions.

Formed several years ago, the Monterey Winegrowers council recently hosted its fifth annual tasting for the Southern California Wine Writers and distributors. This prestigious event was held at The Chronicle restaurant in Santa Monica with a sampling of Monterey county wines from 10 of the participating wineries. These samples left no doubt as to the excellence of Monterey county viticulture.

Once upon a time there were many who liked to find fault with the wines from

Monterey region. One of the favorites was that the wine had a "vegetative" nose. With the maturity of the vines and other scientific breakthroughs this so-called off nose has been eliminated while retaining the much sought-after minty, fruity aroma distinctive to Monterey.

The wines in the order served were:

✓ Jean Wente (President Monterey Winegrowers), Wente Bros. Winery; 1978 Monterey Pinot Blanc. From vines in the Arroyo Seco area, nicely balanced, fragrant, crisp and fruity. Aged for a short time in oak. A fine wine bargain at \$3.95.

✓ Joseph Stillman, Paul Masson Vineyards, 1978 Monterey Chardonnay. Seemed a little light in the

nose at first but filled out as it warmed, good varietal character balance. Aged 25 weeks in French Limosin oak which gave it a smooth finish and flavor.

✓ Bill Jekel, Jekel Vineyards; 1978 Monterey Chardonnay. Outstanding varietal flavor and aroma, buttery smoothness. Fine complexity created by seven months in new 60 gallon French Limosin oak barrels. At \$7.50 a wine to watch for. Lay this one away.

✓ Dr. Richard Peterson, The Monterey Vineyards, 1978 Monterey Gewurztraminer. Very spicy in a true Alsatian style, good balance, fruity, flowery aroma, \$4.50.

✓ Dan Mirassou, Mirassou Vineyards, 1977 Monterey Zinfandel. Excellent berry-like varietal character, high 14.4 alcohol, well balanced with fruit and tannin for a long life. Deep color and full-bodied; \$4.50 makes this an excellent buy. Drink now or save.

✓ Jerry Lohr, Turgeon and Lohr Winery, 1978 Monterey Gamay. Extremely fruity in a Beaujolais style, brilliant color, fine balance. Gold medal, 1979 Los Angeles county fair. \$4.

✓ Klaus Mathes, Almaden

(Continued on Page 38)

★ more Wine

(Continued from Page 6)
Vineyards, 1977 Monterey Cabernet Sauvignon. Good balance of acid and tannin, fruity varietal nose, slightly thin in the mouth but nice flavor, \$4.50.

✓ Bill Durney, Durney Vineyards, 1977 "Carmel Valley" Monterey Cabernet Sauvignon. The first Cabernet to be grown, fermented aged and bottled on the Durney property. Fine full-bodied wine, well balanced, should live for many years with good current drinkability, \$8.

✓ Roy Thomas, Monterey Peninsula Winery, 1977 Monterey Cabernet Sauvignon from the superb Arroyo Seco vineyards. Lovely deep purple, excellent varietal character with a delicate earthy aroma, good tannin for long life but drinkable right now. Aged in "Wisconsin" American oak, \$9.

✓ Doug Meador, Ventana Vineyards. Long time vineyard operators, they bonded their winery in 1978; 1978 Monterey Petite Sirah, estate bottled. Great balance, very fruity, aged in French oak, has varietal peppery flavor and aroma. To be released this month. Doug also disclosed that he has planted 1000 Robur oak seedlings at Ventana. Perhaps California will some day be famous for its oak.

Following the formal tasting, The Chronicle restaurant did its best to enhance these wines which were then served at the luncheon. A delicious soup, salad, stuffed boneless breast of chicken California, and a wine-maker's delight for dessert. Cheese and fresh fruit brought an end to a delightful tasting experience.



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THE WINES AND VINES OF MONTEREY COUNTY

Monterey County is now the fastest growing grape region in the State of California. It has already surpassed Napa and Sonoma Counties in acres planted to premium varietal grapes, all this activity having developed over the past ten years. During this relatively short time much has been learned about the viticulture of the region. It was soon observed that strong, assertive varietal character was a hallmark of Monterey wines, to a far greater extent than is usual in California. Originally the climate of the region was thought to be mild and temperate, a direct result of sea winds that blow through the valley from Monterey Bay every summer evening. However, the presence of morning fogs gives a much shorter period of peak temperature than in Napa and Sonoma and thus a longer ripening time is required. This long, cool growing season is favorable to the production of biochemicals in the grapes that intensify their varietal character. This can be a mixed blessing and requires sensitive winemaking if it is not to overwhelm. Cabernet-Sauvignon has been a particular problem. It now appears that upper Monterey County is California's "Burgundy" while Napa Valley is her "Bordeaux."

Monterey County is also one of the driest grape growing regions of California. Just as the Vosges mountains hold back the Atlantic rains from the vineyards of Alsace, making that winegrowing area the driest of France, so the Santa Lucia coastal mountains hold back the Pacific rains from Monterey. Thus the vast majority of vineyards use irrigation of some form, drawing water from the underground Salinas River.

Wine grapes were first planted in Monterey County in the late 1700s by the Franciscan friars. Between 1830 and 1840, two missions in Monterey County were planted with the Mission grape, a variety that originated in Spain. During that decade Mission Nuestra Senora de la Soledad was planted with 5,000 vines and San Antonio Mission, above the Jolon grade, with 4,000 vines. The Franciscans left the cultivating and harvesting of these vines to the mission Indians who crushed the grapes by trampling them. The juice was fermented in leather bags for use as sacramental wines.

In 1919 vineyards were planted by Chalone at a 2,000 foot elevation high above the valley floor near Soledad because the limestone soil and climate of the area were similar to that of France's Burgundy district.

In 1935 University of California at Davis viticulture and enology professors, Maynard Amerine and A. J. Winkler, started their exhaustive study of California climates,

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dividing the state into regions according to climatic conditions and the types of grapes which could best be grown in each. They discovered, through their research, that Monterey County could be designated as Region I and Region II. Region I is classified as an ideal climate for growing such early-ripening grapes as Chardonnay, Riesling and Pinot Noir. This region is similar in climatic conditions to northern Burgundy, the Champagne district and Germany's Rhine and Moselle.

The slightly warmer Region II is similar to the climate in Bordeaux and is best for such grapes as Sauvignon Blanc, Chenin Blanc, Merlot and Cabernet Sauvignon. The southernmost vineyards in Monterey County are classified as Region III. Here the climate is ideal for the hearty reds: Gamay, Zinfandel and Barbera.

But it was not until the early 1960s that notice was taken of these ideal conditions in Monterey County. Due to the increasing pressure of urban sprawl in Santa Clara and Alameda Counties, Paul Masson, Mirassou and Wente Bros. took a second look at the report by Amerine and Winkler. Further research on the Salinas Valley by these companies revealed that the light, granitic and well-drained soil, the cool afternoon breezes and available ground water made the area eminently suitable for growing wine grapes. These encouraging reports prompted Paul Masson and Mirassou to begin planting vineyards between Soledad and Greenfield in 1962. That year Paul Masson planted 1,000 acres just northeast of Soledad, naming it the Pinnacles Vineyard. Mirassou purchased property in Soledad's Mission district, planting 300 acres. Supplemental acreage to their Livermore vineyards was planted by Wente Brothers in 1963 in the Arroyo Seco district near Greenfield.

During the large state-wide expansion of the wine industry in the late 1960s through the early 1970s everything from small 140-acre vineyards to more than 5,000 acres were planted throughout the County, spreading from Chualar, Gonzales and Soledad in the north to Greenfield, King City and San Lucas in the south.

An additional bonus found by companies planting vineyards in Monterey County was that the area is free of phylloxera -- a vine pest which destroyed large portions of European and California vineyards between 1860 and 1900. These phylloxera-free vines enable the Monterey County grape growers to plant vines on their own root stocks, thus preventing the additional problems of expensive grafting and laborious maintenance.

At present there are 33,655.30 acres of vineyards planted in Monterey County. The more than 20 varieties represent the classic wine grapes of the world - among them Cabernet Sauvignon, Johannisberg Riesling, Chardonnay and Gewurztraminer. Monterey County exceeds all other counties in the State in the number of acres planted to these classic varieties. It also runs a close second to Sonoma County for the number of acres planted to Pinot Noir.

Wineries located in Monterey County include The Monterey Vineyard, Monterey Peninsula Winery, Paul Masson Vineyards, Chalone, Durney and, new to the list, Carmel Bay Winery. Mirassou, Wente, Turgeon and Lohr, Almaden and San Martin, all of which have wineries outside Monterey County, produce wines featuring the Monterey appellation, a term which means that 75% of the grapes used in the wine are from Monterey County. Many of these wineries grow grapes on property in Monterey County which are then transported to their facilities in nearby counties for processing.

Monterey County grapes are sold to other wineries throughout the state and exported to

Monterey. This decision has not yet been made. But at any rate we will build an office building and bottling and warehouse facility at Monterey."

Ventana Vineyards: This 300-acre vineyard is located six miles southwest of Soledad on Los Coches Road, a branch of Arroyo Seco Road. Growing on very deep gravelly soil are Johannisberg Riesling, Gamay, Chenin Blanc, Zinfandel, Pinot Noir, Gamay Beaujolais, Chardonnay, Cabernet Sauvignon, and Petite Sirah. An existing building has been converted to a boutique winery and a small amount of estate wines will be produced. The winery handled its first crush in 1978.

Wente Bros.: Wente Bros. was founded in 1883 and for most of its history has had plantings in the Livermore Valley. The winery now boasts an additional 500 acres in Greenfield, planted in Chardonnay, Grey Riesling, Pinot Noir and Chenin Blanc. Several outstanding wines have been produced from Wente's Monterey property which carry a Monterey appellation. Winemaking and aging are carried on at the Livermore winery on Tesla Road.

A TASTING OF MONTEREY COUNTY WINES

1977 Wente Pinot Blanc: Grapes from the Arroyo Seco Canyon. A clean, fruity wine with accents of vanilla. Reminiscent of a light Chardonnay. Good value. \$3.50.

1977 Durney Chenin Blanc: Grapes from Rancho Del Sueno, Carmel Valley. Pale color. Small nose. Pleasantly dry with a full, rather stemmy flavor. Very high in acid. \$3.95.

1977 Chalone Chenin Blanc: Produced from 50 year old vines of the estate. The yield this year was further reduced by the drought. Wine is very dry but full bodied with robust varietal character. Vanilla scented finish. \$5.75.

1977 J. Lohr Johannisberg Riesling: Grapes from the winery's Greenfield and Junction Vineyards. Alcohol 10.8%, residual sugar 2.8, acid .84. Made in the German Moselle style with low alcohol and relatively high sugar in good balance. No botrytis. Liked by those who prefer sweeter Rieslings.

1977 Paul Masson Chardonnay: Estate bottled from Masson's Pinnacles Vineyards. 100% varietal. Aged in Limousin oak. A sound but pedestrian Chardonnay. \$6.00.

1977 Monterey Vineyard Gewurztraminer: Grapes from upper Monterey County. Strong varietal nose. Spicy flavor with no oak or botrytis discernible. Strongly herbaceous quality is partially subdued with 2.1% residual sugar. Sweet finish. A good example of the assertive flavor characteristic of this area. \$4.50.

1975 San Martin Petite Sirah: Grapes from lower Monterey County. 100% varietal. Alcohol 11.2%. Aged in small American oak casks. Deep glowing color. A big wine with elegant balance. Wines like this could change the image of Monterey County reds. Highly recommended. An excellent value at \$3.50.

1975 Mirassou Petite Sirah, Harvest Selection: Deep red-purple color. Intense fruity-peppery aromas. Big body with good cherry flavors. 13.3% alcohol. Still quite rough with a hot finish. Not yet released. Price will be about \$5.00.

1975 Monterey Peninsula Winery Cabernet Sauvignon: Grapes from the King City area. 100% varietal. Produced in a big style with warm fermentation and 2 years of oak aging.

Deep color, very big aroma, mouthfilling flavor of ripe black currants. Beautiful, lingering finish. Drinkable now but will peak in 4 to 8 years. Outstanding. \$9.00.

1975 Monterey Vineyard Zinfandel December Harvest: Good varietal nose of medium volume. Very big in the mouth but surprisingly soft and smooth. Not overly herbaceous. Firm structure with good alcohol.

1977 Monterey Vineyard Rosé of Pinot Noir: Beautiful blush-pink color with apricot edges. 12.1% alcohol. Light, refreshing, mild fruit flavor with a clean dry finish. A delicious quaffing wine.

* * * * *

ITALIAN FOOD AND WINE WITH MARCELLA AND VICTOR HAZAN

The best way to understand and appreciate Italian wines is to drink them in Italy accompanied by good Italian food. Marcella Hazan's cooking course in Bologna is just such an ideal food and wine experience. She and her husband Victor have collected over 1000 bottles from various regions of Italy and now provide a wine tasting each day of the week-long course in addition to the wines which accompany the food prepared during the class. For details of their 1979 program please refer to the end of this article.

The next best thing to traveling to Bologna is to buy Marcella's new cookbook and prepare authentic Italian dishes at home. (More Classic Italian Cooking, Marcella Hazan. Alfred A. Knopf. 1978. 470 pages. \$15.00). As in her first volume her cooking uses the least complicated means to achieve the most satisfying results - very different from the current image of Italian food preparation. Your editor has cooked through the first volume with great pleasure and is about to begin the second. In the new book there is an extensive section on breads, country-style dishes, lovely cold dishes and an expanded and revised section on making fresh pasta, one of the glories of Italian cuisine. The chapter on desserts with its classic hazelnut ice cream (Gelato di Nocciola) among other fine things is authentic and delectable. Americans unfamiliar with genuine Italian cooking will gain a true insight from Marcella Hazan.

If you are interested in Marcella's 1979 classes in Bologna write to Marcella Hazan, 155 East 76th Street, New York, N.Y. 10021 for further details. A few follow:

Each week's course begins on Sunday evening with a reception and welcome banquet, and ends Friday evening with a farewell diploma dinner. Since a number of people like to stay two weeks, there are two different courses given, course A and course B. They differ in that the lessons, wines, visits, activities of one are not repeated in the other. But they are both at exactly the same level. This means that one doesn't have to take course A to be prepared for course B. In fact, if you are staying in Italy for an extended period you could take course B first, spend the intervening time before course A starts traveling elsewhere, and return to Bologna later for course A.

The one-course fee is \$1,000. The two-course fee \$1,800. This includes not only the cooking classes, but also hotel accommodations for 6 nights (13 nights for those taking two weeks), breakfast, all outside meals, and every field trip. If you can resist the clothes, shoes, or kitchen equipment in Bologna's beautiful shops, you need spend nothing extra during your stay.

Starting dates for course A are May 6, May 27, June 24, October 14. For course B May 13, June 3, July 1, October 21.

Monterey: its PR ear is fine-tuned

THE Monterey Winegrowers Council in California is developing about as acute an ear for fine-tuned public relations and promotion as any industry group you'll find.

The Council operates with a limited budget, but even so it turns out winegrowing information as good as any around and better than most. One big reason is the P.R. person doing the work: Marjorie Lumm, head of Wine Institute's Home Advisory Service for 15 years until the budget panic of 1975 when the WI eliminated her department and thereby chopped off the most productive promotion it had—the popularization of wine cookery among the nation's newspaper food editors. It was a source of wonder to me at the time—and still is—that newspaper food pages, which are more than a little advertiser-oriented, were willing to give Marjorie so much ink (including 4-color product photos) when neither the Institute nor the industry in general (save for importers) were doing any newspaper advertising at all. The answer had to be, of course, Marjorie's persuasive talents plus the top-quality wine cookery recipes and photos she furnished.

The Monterey Council got the late Karl Wentz to ask Marjorie if she'd like to handle its account and she said yes. The growers should be glad she did.

Last winter she arranged a San Francisco tasting of Monterey County wines to showcase the progress this new district has made. It is the fastest growing wine region in North America and is becoming one of the most favorably known.

Not that grapes are new to Monterey; the first vines were planted by Franciscan monks in the late 1700s; the churchly plantings climaxed in the 1830s-40s when there were almost 10,000 vines at the missions of Soledad and San Antonio. After desecularization, nothing much happened except Chalone—now a much larger but still small winery at the 2,000-foot level near Soledad—planted a small vineyard in 1919. In the 1930s, U.C.-Davis established Monterey as mostly Region I and Region II—the coolest areas in their five optimum grape-growing regions. Region I is prime for early grapes: Chardonnay, Riesling and Pinot Noir; II for Bordeaux grapes such as Sauvignon Blanc and Cabernet Sauvignon. Farther south there is a little region III, good for Zinfandel, Gamay and the Italianate Barbera.

When urban sprawl forced Ed and Norbert Mirassou to look for land somewhere out of Santa Clara County they looked up U.C.'s research on adjacent Monterey. Together with Paul Masson Vineyards they pioneered the area along with another early believer—Karl Wentz. This was in the early 1960s. In the late 1960s and the early 1970s—during the wine "boom"—plantings were widespread. Now there are almost 34,000 acres of vines in Monterey planted to more than 20 varieties, including the classics: Cabernet Sauvignon, White

Riesling, Chardonnay, Gewurztraminer and the like. Another 7,718 more acres are coming into bearing.

Mirassou, Wentz, Turgeon & Lohr, Almaden (not a councilmember) and San Martin, all with wineries outside

Monterey, produce wines with the Monterey appellation, meaning 75% of the grapes used in the wine are from the district. Paul Masson was the pioneer in building a winery in Monterey (save for the small but select Chalone plant). Others such as The Monterey Vineyard and the Monterey Peninsula Winery have followed suit. Boutiques have opened recently, including Durney in the Carmel Valley, Jekel of Greenfield and Ventana out of Soledad. Gold Seal, the New York State winery whose products are marketed by a Seagrams subsidiary, has a large (1,380 acres) planting of classic vines.

Most of the vineyard area is known more familiarly as the Salinas Valley and is a great source of vegetables. Next door to The Monterey Vineyards, somewhat incongruously, is a large sign proclaiming the area "Salad Bowl of the Nation." The produce people are pleased with the wine development, however; grapes are the third or fourth largest crop in the county with a gross of over \$26 million. In the winter, when there are few row-crop jobs for farm workers, the winegrowers are pruning. This makes for year-around jobs and a more stable farm work force.

Generally speaking, the plantings require extra water—the climate is fairly dry—and this is supplied by sprinkler or drip systems. The water helps fend off frost and tempers summer heat. Because vineyards are large and new—and tailored for it—a good deal of rigpicking is done as well as field crushing and de-stemming.

Monterey is not for raisins or table grapes: for one thing the land is too expensive, making a high average return mandatory. The wines, as shown in this most recent tasting, are in the top rank. Some reds, particularly Cabernet Sauvignon grown where it is too cool, have been found to develop a "bell pepper" characteristic. This, plus the white wine popularity of recent years, has resulted in the budding over of about 550 acres from reds to whites, or to earlier-maturing reds. Other Central Coast growers faced with the bell pepper problem, notably Al Gagnon and Louis Lucas of

Tepusquet Vineyards at Santa Maria, discovered by traveling to Bordeaux that "bell pepper" is no big thing; it is common to young Bordeaux reds too, and the great houses won't use grapes for their heirloom wines until the vines are well out of kindergarten. Similar practices are indicated for Monterey, with vineyardists like Peter Mirassou getting more maturity earlier by fine-tuning water applications.

Soren Axelsen presided over the Monterey Council's tasting, at which each of the vintners talked about his own wines and described his enterprise. Axelsen has been a Monterey grower since 1972, in charge of Gold Seal's International Vineyards. A long journey from his native Denmark and one undertaken in part by happenstance. Soren came to the U.S. to sell Tuborg beer. By the time that distributorship had moved into other hands he was hooked on winegrowing. He sees big things for Monterey, pointing out that because of irrigation its grapes are grown in what is close to a controlled environment. Another plus: the soil is phylloxera-free and vines do not have to have resistant grafted rootstock.

Some of the vintner comments: Eric Wentz, president of the family firm, spoke firmly on oak aging for white wines, especially the Wentz Pinot Blanc from Arroyo Seco Canyon. It is made in the Burgundy style, with very little oak. Eric thinks it undesirable for the Wentz types, saying: "We want the wine to taste like the grape, not the container; we will probably use even less oak in the future."

On the other side of the coin, for those who like oak, Morris Katz of Paul Masson showed a 1977 estate-bottled Pinnacles Selection 100% Chardonnay aged 26 weeks in new Limousin 60-gallon casks.

Ed Friedrich of San Martin offered a 1975 Petite Sirah, also 100%, grown in the warmest Monterey area: King City. Friedrich is a great believer in whites of less than 10% alcohol and Peter Stern of Turgeon & Lohr, who presented a high-fruit 10.7% alcohol White Riesling, said he, too, expects to be making even lighter wines.

P. H.

Monterey Vineyard Offers State a New Breed, Direction of Wine

By KEN FORRESTER

A meeting of the Little Rock Chapter of Les Amis du Vin provided the setting last week for the introduction to Arkansas of Monterey Vineyard wines. Monterey president ~~and winemaker~~, Dr. Richard Peterson, did the honors.

The wines, not inexpensive, are representative of a new direction in winemaking, if not a new breed of wines.

Monterey County, south of San Francisco, has opened up only recently to extensive grape growing, mostly due to urban expansion into other, well-established wine growing areas. Climate and soil make for distinctive wines: The climate has been found to be of the type necessary for the development of botry-

tis cinerea, the "noble mold" that makes possible the great Sauternes of France; the soil is similar to that of Burgundy and Champagne. The area is more favorable to white wines than to red (with a couple of outstanding exceptions) and whites dominated the evening's tasting.

The tasting, with comments by Dr. Peterson, was preceded by a slide presentation showing the county and the vineyard with a commentary on the grape growing conditions peculiar to the area. The meeting was further unique in that a larger selection of cheese was offered to complement the wines than has been the practice in the past. A negative note (the only one in my opinion) was the fact that this was a one-glass per person tasting,

making necessary a lot of rinsing of that glass and preventing the tasting of one wine against another.

The initial offering was of a 1977 Chardonnay of intense varietal character, light gold in color, complex in aroma and taste. Oak aging was evident, alcohol content was 13.6 per cent and the aftertaste lingered. People who like to compare and contrast American varietal wines with their European counterparts will have a field day with this one.

A 1977 Johannisberg Riesling was lighter and sweeter than the Chardonnay, was flowery in bouquet and taste with a smooth aftertaste. It was not (following customary practice) aged in wood. Re-

sidual sugar was stated to be about 1 per cent.

A 1977 Chenin Blanc was somewhat thin, but sweet and flowery. It had, to me, a puzzling undertaste which I didn't identify but which did not detract from my enjoyment of the wine.

A 1977 Rose of Cabernet Sauvignon, beautiful in color, with 13.8 per cent alcohol, embodied the herbaceous bouquet and taste sometimes associated with the wines of the Monterey area. This taste is most often described as a "bell pepper" taste and is sometimes disturbingly obtrusive. In this wine it was understated but recognizable. If you have not yet encountered it, you might try a bottle of this wine to use as a point of reference in

future tastings. It is more pronounced in some regular bottlings of Cabernet Sauvignon.

A late harvested (December) Zinfandel had been chilled to bring it to ideal temperature and was served much too cold. However, we were forewarned and the mistake turned out to be a fortuitous one: When the wine was first poured, it was "numb" with the cold; however, it was a pleasing experience to have it develop minute-by-minute in the glass as it warmed up. The flavor, when finally fully revealed, was very intense, with a cedary, spicy undertone. Others found the flavor of raspberries, currants or black pepper. Regardless of the subjective nuances, it was well balanced, tan-

nic, aged in wood, 14.4 per cent alcohol, a wine to lay down for serving through the 1980s.

A second Johannisberg Riesling, a Thanksgiving harvested offering, was made from late harvested grapes touched by botrytis. At 5 per cent residual sugar it was reminiscent of a German auslese or perhaps a beerenauslese. It is a beautiful wine, complex, luscious, smooth.

Finally, there was a botrytised Sauvignon Blanc of 9 per cent residual sugar, sweet, rich, almost overpowering, a fitting conclusion to any evening.

These wines are in short supply, even in California where all of them might be marketed with ease.

26 MONTEREY by Lee Foster

An updated view of this natural paradise.

No agricultural product quickens the imagination more dramatically than grapes used to produce high quality wine. Moreover, the idea is alluring that a major new wine region, born almost overnight, can now be visited. Such is the drama of the Monterey Peninsula.

The story of Monterey wine began late in the 1950s when several prominent California wine companies began looking for new growing space. The Wentes were being crowded out of their holdings in Livermore by urban expansion. The Mirassous of Santa Clara saw property taxes and housing tracts encircle them. Paul Masson in Saratoga observed that their once rustic setting was becoming part of a sprawling urban region stretching from San Francisco to south San Jose.

Planners in each of these companies researched the University of California Davis studies done by A. J. Winkler and Maynard A. Amerine in the 1930s that evaluated all California regions for wine grape production. Monterey emerged as the unplanted area with the greatest potential. For reasons of historic accident and because row crops were grown so successfully in this "Salad Bowl of the Nation" of John Steinbeck's days, few vines had ever been planted.

In 1961, near Soledad, Peter Mirassou began the first grape plantings for the company that bears his family name.

"We were gambling in those days," he says. "No one could predict for sure that Monterey would produce such fine wine grapes."

Wente and Paul Masson followed. During the 1960s other growers put in vines from Gonzales in the northern part of the Salinas Valley to south of King City. By the early 1970s plantings had reached an unprecedented level. Vines replaced row crops in some lowland tracts, but most of the vines were placed on benchlands that had previously been dry farm or grazing land.

Today there are 33,655 acres of wine grapes in Monterey, all planted in prime varieties. This is more classical grape acreage than exists in either the Napa or Sonoma valleys north of

San Francisco. The most prominent variety is Cabernet Sauvignon with 6,044 acres.

Several technical advances assisted these pioneers. The vines were trained on overhead wires so that grapes could be machine picked and even crushed immediately, right in the field, for minimum quality loss due to oxidization. Because the root louse, phylloxera, had never been present in this region, the new vines were planted on their own rootstock, giving perhaps a truer grape taste than had been possible elsewhere in the country. Overhead irrigation systems were installed, giving the grower complete control over the vines. In dry weather the sprinklers could irrigate. To combat excessive summer heat, the sprinklers could be turned on to cool the vines. In frost, water sprinkled over the vines kept the plants from freezing. Herbicides, pesticides and fertilizer could be administered precisely

through the sprinkler system. Nowhere is the contrast between total control of the grapes and total dependence on the vicissitudes of nature more apparent than in a comparative look at Monterey vs Bordeaux or Burgundy.

To visit the region, leave Monterey by car on the Salinas-Monterey Highway to Salinas. In Salinas take a diversionary pause to see the house of writer John Steinbeck, 132 Central, and have lunch or dinner at the restaurant, East of Eden, located in an old Presbyterian Church on Pajaro Street. Steinbeck would scarcely recognize this revolution in agriculture if he were alive today.

Continue south on Highway 101 until you reach the Gonzales turnoff, Gloria Road, where you turn right and then right again to the Monterey Wine Company, 800 South Alta, an architecturally exciting building equipped with the state-of-the-art technology for making fine wine, even in small lots. The company offers free tasting to the visitor.

After you leave, drive south to Greenfield, west on Elm Avenue, and north on Arroyo Seco-Fort Romie Road to get a sense of the vastness of plantings here. You'll pass the Wente and some of the Mirassou holdings. Paul Masson has a large winery and vineyards on the west side of the valley, but only offers tasting in San Jose, far to the north. When returning to Monterey stop at the Monterey Peninsula Winery, 2999 Monterey-Salinas Highway. This company is a good example of the smaller experimental wine producers from Monterey. The best shop at which to see a range of Monterey wines is Nielson's Market, 7th and Dolores, in Carmel. Here are my suggestions for some good drinking of nationally distributed wines:

Almaden 1975 Monterey Charles Lefranc Cabernet Sauvignon

Paul Masson 1976 Pinnacles Gewurtztraminer

Mirassou 1977 Monterey Riesling

Monterey Peninsula Winery 1976 California Zinfandel

Monterey Wine Company 1975 Pinot Noir

San Martin 1975 Petite Sirah

Turgeon and Lohr 1977 Johannisberg Riesling

Wente 1977 Pinot Blanc

Your wine

By DONALD BREED

Californians to Frenchmen: Prepare palates

For years, the rarest and best California wines never got out of the Golden State, unless they were carried east in some tourist's suitcase. The winemakers had limited production, and it was natural to sell to their friends and loyal followers who would come to the winery and snap up wines as soon as they were released.

This was true of the small wineries who never sold a bottle in the East, but also of the large companies who had some limited bottlings of exemplary wine that never got into the national network. (The fact that wineries could charge the full retail markup for wines sold at their premises was an added incentive.)

Eventually, however, the winemakers began to yearn for a national reputation. They wanted to let those Easterners who thought California wine was aged in tank cars to know how good their wine actually was. So they began to sell in selected Eastern markets: Washington and New York, and then other places like Boston and, yes, Rhode Island.

THAT WAS fine. We thank them for that. But now they're after an international reputation, darn it! Last month there was a tasting in Paris sponsored by the American organization, Les Amis du Vin, and more than 50 California vintners sent some of their best to try to impress the French.

There will be another tasting in May as part of an effort by 30 small California vintners to export to France. To crack this market, they not only have to appeal to French palates, they have to overcome tariff barriers and non-tariff problems — including the perfectly reasonable objection by the French against the use of

"chablis" and "burgundy" for wines not made in those regions.

Altogether, the California wines will have to sell for \$10 to \$15 a bottle, about the price of top French wines.

Well, I suppose any kind of export is good for the dollar, and the French really ought to know what Americans can do. So this enterprise of showing the flag is commendable. But what a shame that Heitz Wine Cellars sent its 1974 Martha's Vineyard Cabernet Sauvignon to the Paris tasting when Rhode Islanders will be lucky to share one case amongst all of us. Or that Stag's Leap Wine Cellars should have sent its 1974 Cabernet Sauvignon Cask 23.

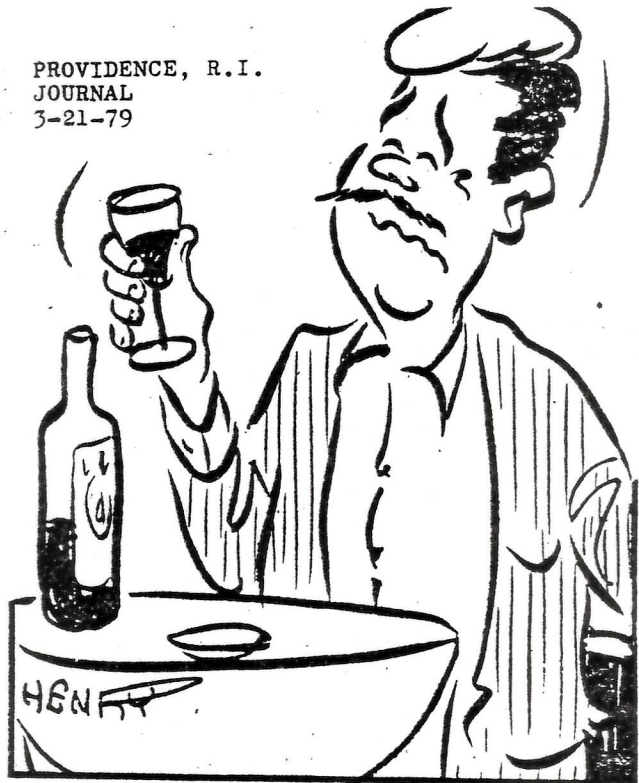
AND THIS, according to press coverage, is the kind of remarks they earned: "A curiosity, like drinking Chinese scotch." (From a restaurateur.)

"California wine is sweet. Americans like sweet things, but the French don't." "California chablis lacks elegance. It smells like wood from the barrel."

Georges de Boeuf, wine expert and wholesaler from Beaujolais, said he preferred the Zinfandel, a grape grown scarcely at all outside the U.S. It is, he said, "not a bad copy of a French wine, as is the Cabernet Sauvignon, which recalls Bordeaux but has too much alcohol. The Zinfandel has its own character. It's a real American wine."

"The whites are in general better than the reds. The best are the Chardonnays. But the whites are still too heavy, too rich, too strong. You have to serve them very cold in order to drink them easily. They are very structured and miss delicacy. Dry but not acid enough."

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How about our Gamay Beaujolais? The wholesaler from the real Beaujolais called it "undrinkable. Truly bad." (As I have said before in this space, I've yet to drink a really good wine from that particular grape.)

Another critic said: "In whites, they're nearly at the level of good regional crus. But the reds, the climate is a bit hot. Maybe they're kept too long in wood. Some give the impression of Algerian wine."

It wasn't all unfavorable or patronizing, though. Eric de Rothschild (of Chateau Lafite-Rothschild) said of some of the wines: "They're comparable in quality to second crus in Bordeaux. The proof will be in their aging."

The Paris director of Les Amis du Vin summed it up by saying the wines "were accepted, with reservations."

AS CONSUMERS, you might like to know what the vintners selected, since they obviously wanted to put best feet forward.

Almaden, for example, sent its 1977 Monterey Sauvignon Blanc. Christian Brothers selected 1977 Pinot Chardonnay. Gallo picked its nonvintage Sauvignon Blanc.

Hans Kornell sent its sparkling brut (it could not have been called champagne in France). Louis M. Martini's 1977 Gewurztraminer was there; it may not be in Rhode Island, though. Paul Masson was represented by 1977 estate-bottled Fume

Blanc. Robert Mondavi also sent a 1977 Fume Blanc. Sterling Vineyards picked its 1977 Chardonnay. Wente Bros. sent its nonvintage Sauvignon Blanc. Monterey Vineyard chose its 1975 December Late Harvest Zinfandel. Partucci sent 1975 Cabernet Sauvignon.

Those are all wineries whose products are distributed in Rhode Island. You can look for them in package stores, or inquire about ordering them.

SOME OF the boutique wineries are here, but only at Town Liquor in East Providence, which has made particular efforts to get obscure California wines to this state.

These wines were at Paris and are at Town Liquor: Burgess 1976 Cabernet Sauvignon, Chateau Chevalier 1976 Cabernet, Chateau Montelena 1976 Napa/Alexander Valley Chardonnay, and Diamond Creek 1976 Volcanic Creek Cabernet.

Others from the Paris tasting that are ordered but not yet at Town Liquor are: Burgess 1976 Cabernet; Chateau St. Jean 1976 Napa/Alexander Chardonnay, Dry Creek 1977 Fume Blanc, Firestone 1977 Johannisberg Riesling, Gundlach-Burdschu 1976 Cabernet, Robert Keenan 1977 Chardonnay, J. Pedroncelli 1975 Zinfandel, Raymond Vineyard 1976 Chardonnay, St. Clement 1977 Chardonnay, Stonegate 1975 Napa Cabernet, and Sutter Home nonvintage Zinfandel.

Economic Implications of the Wine Grape Industry in Monterey County

The wine grape industry has created a substantial economic impact on the agricultural development of Monterey County as demonstrated by the increase of \$21,734,000 in gross income from the county's grape production between 1974 and 1977.

Wine grapes were first planted in Monterey County in the late 1700's by the Franciscan friars. Between 1830 and 1840, two missions in Monterey County were planted with the Mission grape, a variety that originated in Spain. During that decade Mission Nuestra Senora de la Soledad was planted with 5,000 vines and San Antonio Mission, above the Jolon grade, with 4,000 vines. The Franciscans left the cultivating and harvesting of these vines to the mission Indians who crushed the grapes by trampling them. The juice was fermented in leather bags for use as sacramental wines.

In 1919 vineyards were planted by Chalone at a 2,000 foot elevation high above the valley floor near Soledad because the limestone soil and climate of the area was similar to that of France's Burgundy district.

In 1935 noted University of California at Davis viticulture and enology professors, Maynard Amerine and A. J. Winkler, started their exhaustive study of California climates, dividing the state into Regions according to climatic conditions and the types of grapes which could best be grown in each. They discovered, through their research, that Monterey County could be designated as Region I and Region II. Region I is classified as an ideal climate for growing such early-ripening grapes as Chardonnay, Riesling and Pinot Noir. This region is similar in climatic conditions to northern Burgundy, the Champagne district and Germany's Rhine and Moselle.

The slightly warmer Region II is similar to the climate in Bordeaux and is best for such grapes as Sauvignon Blanc, Chenin Blanc, Merlot and Cabernet Sauvignon. The southernmost vineyards in Monterey County are classified as Region III. Here the climate is ideal for the hearty reds: Gamay, Zinfandel and Barbera.

But it was not until the early 1960's that notice was taken of these ideal conditions in Monterey County. Due to the increasing pressure of urban sprawl in Santa Clara and Alameda Counties, Paul Masson, Mirassou and Wente Bros. took a second look at the report by Amerine and Winkler. Further research on the Salinas Valley by these companies revealed that the light, granitic and well-drained soil, the cool afternoon breezes and available ground water made the area eminently suitable for growing wine grapes. These encouraging reports prompted Paul Masson and Mirassou to begin planting vineyards between Soledad and Greenfield in 1962. That year Paul Masson planted 1,000 acres just northeast of Soledad, naming it the Pinnacles Vineyard. Mirassou purchased property in Soledad's Mission district, planting 300 acres. Supplemental acreage to their Livermore vineyards was planted by Wente Brothers in 1963 in the Arroyo Seco district near Greenfield.

During the large state-wide expansion of the wine industry in the late 1960's through the early 1970's, everything from small 140-acre vineyards to more than 5,000 acres were planted throughout the County, spreading from Chualar, Gonzales and Soledad in the north to Greenfield, King City and San Lucas in the south.

An additional bonus found by companies planting vineyards in Monterey County was that the area is free of phylloxera -- a vine pest which destroyed large portions of European and California vineyards between 1860 and 1900. These phylloxera-free vines enable the Monterey County grape grower to plant vines on their own root stocks,

thus preventing the additional problems of expensive grafting and laborious maintenance.

At present there are 33,655.30 acres of vineyards planted in Monterey County. The more than 20 varieties represent the classic wine grapes of the world - among them Cabernet Sauvignon, Johannisberg Riesling, Chardonnay and Gewurtztraminer. Monterey County exceeds all other counties in the state in the number of acres planted to these classic varieties. It also runs a close second to Sonoma County for the number of acres planted to Pinot Noir.

Wineries located in Monterey County include The Monterey Vineyards, Monterey Peninsula Winery, Paul Masson Vineyards, Chalone, Durney and, new to the list, Carmel Bay Winery.

Mirassou, Wente, Turgon and Lohr, Almaden and San Martin, all of which have wineries outside Monterey County, produce wines featuring the Monterey appellation, a term which means that 75% of the grapes used in the wine are from Monterey County. Many of these wineries grow grapes on property in Monterey County which are then transported to their facilities in nearby counties for processing.

Monterey County grapes are sold to other wineries throughout the state and exported to foreign countries such as Canada and Japan.

The increasing expansion of the industry has made grapes the number six crop in Monterey County, with an impressive gross income of \$26,810,000. This total represents income from an average production of 2.24 tons of grapes per acre from the 25,937 bearing acres in Monterey County.

These gross receipts are sure to increase rapidly as the average per-acre production grows as many young acres mature and 7,718

presently non-bearing acres come into production.

Monterey County vineyards have a reputation for highly developed technology as evidenced by mechanical harvesting and field crushing and stemming, although many functions are still done by hand in the vineyards. Pruning and tying, for example, are done basically by hand with pneumatic shears as a mechanical aide. There are many variations of the two basic pruning systems: cordon pruning and cane pruning. Training, thinning and suckering of the vines during pruning are done on a two or three-wire trellis.

Other necessary practices in the vineyard include irrigation, heat suppression and frost protection. The vast majority of Monterey vineyards utilize some form of irrigation, the most common of which is permanent set overhead sprinklers. There are several drip irrigation systems and a small number of the more traditional furrow irrigation systems.

Although in high rainfall years some grape varieties do not need additional water, the area's normally semi-arid climate usually requires some irrigation. This contrasts with other fine wine-growing regions which, for the most part, have substantially higher average annual rainfall. And in some cases, the root system of the vines are within reach of the ground water tables.

Irrigation with overhead sprinklers allows wetting of the entire soil surface within the vineyards; it also allows precise amounts of water to be evenly distributed throughout the vineyard.

In addition to providing water, overhead irrigation is a means of frost protection and heat suppression, thereby allowing control of climatic extremes which otherwise would have a detrimental effect on the vineyard.

Two additional possible advantages of overhead and drip irrigation are some degree of insect control and the ability to apply fertilizers, fungicides, pesticides and herbicides through the system. These are currently being researched by the County's agricultural extension service.

Sprinkler and drip irrigation have been found to be labor saving, energy saving and water conserving because they are able to precisely control the amount of water applied, and they can be used to apply chemicals. These factors provide management with an unparalleled amount of flexibility.

This flexibility is especially apparent in vineyards using permanent set overhead sprinklers. A vineyard manager with such a system can immediately avoid heat and frost problems. Such prompt action is unavailable to vineyards using the traditional furrow irrigation method.

The use of overhead sprinklers for frost protection also precludes the necessity for such devices as smudge pots or heaters in Monterey County.

The varying styles of vineyard management integrate their own combinations of chemical, mechanical and hand weed-control. Some soils indicate the need for deep-ripping and/or slip plowing - usually in vineyards with extremely compacted soils.

A wide variety of harvesting techniques are employed in Monterey County: individual hand selection of botrytised clusters; hand harvesting of the entire crop; mechanical aides to hand harvesting; full mechanical harvesting; mechanical harvesting with field stemming and crushing. The procedure ends when the resulting must, preserved with sulfur dioxide, is transported to the winery in stainless steel tanks.

The need for advanced technology and improved methods has resulted by growers in the formation/of a non-profit association whose primary purpose is

to further viticultural technology. The association's other purpose is to disseminate information among growers and the industries that provide goods and services to them and between growers and regulating and government service agencies.

In a move toward technological advancement, the association is funding research projects to study such things as powdery mildew control, Botrytis cinerea control, climatology, budding, new variety testing and second crop control. In addition, the association provides grower-co-operators for the University of California and its extension service.

When grapes first were planted in the Valley, one of the concerns of the row crop farmers was what land would be used for vineyards. Some of the vineyards planted in the County were on acreage formerly used for vegetable crops and/or field crops, but most of the vineyards were planted on previously non-irrigated acreage such as pastureland and dry grain land. The property tax base in the County was thus drastically changed by the development of these previously under-developed acres.

The vineyards have brought additional benefits to Monterey County in the form of capital, supplies and labor requirements. It has had a particularly positive impact on the pattern of labor requirements. During the winter, when there is little or no need for a labor force for row crops, the grape industry is in its pruning season. The need for workers from December to mid-March in the vineyards has filled what has been, heretofore, a traditional void in the County's labor force. The grape industry has provided many former seasonal workers with permanent year-round jobs thus contributing to the economy in general in Monterey County. As more vineyards are planted, grapes will undoubtedly become one of the high-return crops in Monterey County.

California wines praised

By ROBERT LAWRENCE BALZER

WHEN MICHAEL DEMAREST researched his excellent four-page report on California wines for *Time* (Jan. 14, 1980), it obviously included that magazine's cover story back in November, 1972.

A quotation from Baron Philippe de Rothschild was too neat to avoid, even though the alleged comment on California wine was later denied in print: "It all comes out industrially uniform, like Coca-Cola."

Having been privy to that earlier issue, which drew its color-photo montage of winemakers from our own Cabernet Sauvignon tasting, we suggested Baron Philippe would never have made such a comment, because it was not his thinking about California wines, either then or now. But like an Elizabethan conceit, it now seemed to have a double-edged thrust because Coca-Cola had, in the intervening seven years, moved into the California wine industry, and Baron Philippe is on the threshold of a Napa Valley winery project with Robert Mondavi.

SOMETIMES IT TAKES a national magazine, like *Time*, with its enormous international readership, to solidify new truths, like the pre-eminence of California wines, into the consciousness of the man-on-the street.

It's nice to read that our so-called jug wines are "light-years better than the vin ordinaire that gurgles by the gallon down French gulleys."

Demarest also handed out a well-deserved bouquet to Ernest and Julio Gallo for their new line of oak-aged varietals, of imminent debut on our market.

The article's concluding editorial box write-up of "Small Sellout Vineyards" pointed wine lovers to three premium wineries, Sterling Vineyards, Joseph Phelps Vineyard, and Ridge Vineyard with label reproduction; and Stag's Leap Wine Cellars, Chapallet, Santa Ynez, Burgess, Joseph Swan, Sanford & Benedict, J. Lohr, Keenan, Heitz and Chateau St. Jean whose releases are "instant sellouts."

There were almost 100 new small wineries bonded in the last decade in California, nearly all of which are producing superb wines, most of which, alas, seldom reach East Coast consumers. There are, however, a growing number of wine merchants and restaurateurs across the land recognizing the magnetism in these very California titles and prices.

REFERENCE WAS MADE in the *Time* piece to the small winery of Robert and Zelma Long in the Napa Valley, whose 1977 Napa Valley Chardonnay received from us the most

enthusiastic coinage of praise we could muster in the whole decade.

What a wine! Its total perfection had to establish new heights of sensory pleasures from that grape, overreaching even those from the finest Montrachet or Meursault or memory. But even with careful allocation by Long Vineyards, in selected places across the country, it was an "instant sellout" which only a privileged few might enjoy.

One of those who did enjoy it was Doug Meador, of Ventana Vineyard in Monterey County.

David Breitstein, the "Duke of Bourbon" wine merchant in the San Fernando Valley, poured it for him when the winemaker was down that way on a luncheon visit. "I told him," Meador told us, "that was how I'd like my own Chardonnay to turn out."

He had recited the story over the phone when we called him to wax equally enthusiastically about his own 1978 Monterey County Chardonnay (\$9). How much more of it did he have? Or of his 1978 Monterey County Sauvignon Blanc (\$6.50), an equally splendid, rich, long and silky winner? His whole vintage was sold out!

A SAN FRANCISCAN wine-writer had just lit verbal fires under the last of his 1978 Monterey County Gamay-Noir (\$4.50), moving the last 300 cases out of the old converted dairy-barn frame winery.

There's little point in even mentioning the 1978 Late Harvest Monterey County Chardonnay (Residual Sugar 6.1 Brix). He only made 62 cases from the Botrytised clusters. At \$19 it's a collector's curio, maybe available in a few of the country's better wine shops.

Ventana Vineyards is not one of California's more beautiful

new wineries. Like Sanford & Benedict's restored wooden barn in Lompoc, it looks like a good windstorm could reduce those weathered boards to piles of kindling. Not so. Both have been reinforced, and somehow insulated, the shady interiors of each cool cover for the most impeccable, expensive installations of stainless steel technological equipment, fitted neatly alongside equally fine French oak cooperage.

When we were last there, at the end of the '79 vintage season, a mechanical harvester was standing in the rocky service yard being hosed down and cleaned to await vintage 1980.

DOUG MEADOR CALLS his vineyard area a "rock pile," and the vines do indeed grow out of soil that could support no other crop.

It's the Arroyo Seco wash just west of Soledad. It leads, via that rocky creek-bed, to the Ventana Wilderness Area, up into the mountains between the Salinas Valley and the Big Sur Country, prehistoric volcano territory, called the Ventana Cone.

There is now no doubt but that this is a place from which some of California's finest wines will come.

In 1978, Meador produced 7,000 cases of fine varietal wines. Happily, in 1978, his more-than-double production of 15,000 cases will begin to emerge on the market in the late spring.

He believes the 1979 wines will be even better than the '78s. Neighboring vineyardist Peter Mirassou believes equally that the region's '79 crops are going to make "more elegant" wines.

THE MISTY, ALMOST Corot-like sepia photograph which illustrates the black and gold Ventana Vineyard labels was made by Doug's wife Shirley Meador, who has another print currently nominated for the oncoming vintage selections.

Our words here are intended as advance trumpeting so you'll be among the lucky ones to share in the releases from this outstanding new young winery.

For any further information, write Ventana Vineyard, P.O. Box G, Soledad, Calif. 93960, or phone (408) 678-2306.

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1979 MONTEREY CROP APPEARS FAVORABLE

MONTEREY, CA.—Grape growers of Monterey County who have been guardedly optimistic throughout the difficult growing season of 1979, are beginning to breathe easier now that most of the crop is in.

After an auspicious beginning, problems started appearing in September when the vines, stressed by a heat wave, stopped developing for an agonizing period immediately afterward. In the cool weather which followed, grape sugars climbed slowly. But finally, with a little more sun, they reached desired levels. Now most of the grapes are safely delivered to wineries, unharmed by the few sprinkles of rain that have fallen recently.

The quality, despite the problems, looks good. The quantity is slightly higher than last year in some varieties; slightly lower in at least one important variety, Chardonnay, according to Terrel West, vineyard manager of Arroyo Seco Vineyards in Greenfield.

Jim Smith of S.M. Farms in Soledad reports "Our crop is 90 percent off the vines now. It matured fairly early so we are in good shape. The tonnage was better than last year, except for the few acres which were grafted over a year ago. Not sur-

prisingly, those vines yielded only a small crop this year."

Though it is too early to predict total tonnage from Monterey's 33,000 acres of vineyards, growers agree that most of the vines are old enough now (the youngest were planted in 1974) so that this year's total can be considered typical of years to come. A 10 to 20 percent increase this year over last just about reflects the proportion of vines reaching maturity this year.

It is indicative of the healthy state of the Monterey wine region that most of the grapes grown there "find a home" in the Monterey wineries or those which are physically located outside of Monterey but own vineyards in the County. Paul Masson, Almaden, Wente Bros., Mirassou and Turgeon and Lohr are examples. Some grapes are contracted for by wineries in other areas. Gallo has contracts for large amounts of Monterey-grown grapes.

Proof of the excellence of the crop is in the wine it produces. White wines of the 1979 vintage will be released by wineries starting in early spring. Most of the red wines will require longer aging in oak and bottle, and will not be available for tasting for two or more years, depending on their development.

Beverage Retailer
Weekly
Dec. 17, 1979

Outlook Bright For Late Harvest Wines In California's Monterey County

"Will there be any Botrytised wines from this year's vintage?" That's the question wine buffs ask as they check the harvest reports from Monterey County.

The answer for 1979 is still not certain, but chances are good that some Johannisberg Riesling grapes will be late-harvested, and almost certainly "infected" with the Botrytis mold which gives the wine the taste of honey.

One of the most intriguing features of Monterey County wine growing is the appearance every year of this friendly grey mold. It starts as a thin film, powdery white, but soon turns pink, then grey. Moisture from sea breezes and warmth from the sun encourage it to send hair-like capillaries down into the grape, concentrating the sugar and flavor elements and adding its own honey-like essence. Some years it flourishes better than others.

This year there was a long period of warm, but not very

sunny weather, with moist winds from Monterey Bay. Most molds — and Botrytis is no exception — like warm, moist growing conditions. So the mold had a good start. Those vineyard managers who are willing to gamble a little have left certain blocks of Johannisberg Riesling grapes unpicked, to become sweeter and slightly shriveled with late Autumn sun.

If winter rains hold off, they'll be rewarded, and so will wine buffs, with heavy-bodied wines of luscious flavor and concentrated sweetness, with enough natural acidity to balance the grape sugar.

Wente Bros. vineyards in the Arroyo Seco region near Greenfield have yielded some memorable Botrytised wines. Their first was the 1965 vintage,

followed by several others in the early 1970s. Their most recent one, still available in limited quantities, was the 1977 vintage. The potential is good for another one in 1979.

Another noteworthy example of Botrytised wine is The Monterey Vineyard's 1977 Thanksgiving Harvest Johannisberg Riesling. According to President and Winemaker Richard Peterson, the grapes for this wine were picked the Monday after Thanksgiving. Vineyard manager Phil Johnson confirms that he is holding back about 100 tons — the yield from 26 acres of Johannisberg Riesling vines — for another Thanksgiving Harvest wine. The way the season is progressing, it appears the grapes will be ready at almost exactly the same date this year as in 1977.

Feature

Monterey Winegrowers Council Cites Growth Five Years After Founding

Five years ago, a group of business and professional men with major investments in Monterey County vineyards and wineries created an organization unique in the world of wine.

The Monterey Winegrowers Council was organized as a non-profit corporation supported by dues based on owned acreage in the County and on tons of grapes crushed from Monterey vineyards. The Council's single purpose is to acquaint the public with Monterey as a fine wine growing region and with the excellence of the wine produced from its vineyards.

Here the vineyard owners and managers work closely with the wineries who utilize their grapes. There's a spirit of cooperation not found in other, older wine regions. Knowledge and experience are cheerfully shared, for Monterey is still a grape land of discovery.

In the early days of Council activities, the informational program was largely a promise of good wines to come. In articles

published nationally, the geography of the region was explored in detail: the sources of its water, the "upside down" Salinas river became common knowledge; the persistence and direction of the wind off Monterey Bay was related to vineyard layout; the moist coastal fogs were credited with the development of the desirable Botrytis mold; the granitic, well-drained soil, free from Phylloxera of older wine regions, was related to the planting of grapes on their own roots without the necessity of grafting which is required in most other California regions and in Europe.

When the vines matured and the first white wines were released to a waiting public, the region's promise became a fact. Spiritely,

flowery wines with intense varietal flavors came from vineyards from Chualar to the North to San Lucas in the South. Though there were differences due to micro-climates, it soon became apparent that the one characteristic common to all wines from Monterey is flavor intensity. There was a natural shift in emphasis from growing conditions of the grapes to the wine in the glass.

After two years of informational activity, Council members ventured into the New York markets to show wine writers and retailers the early products of the region. In 1978 the program of tastings was expanded to two more Eastern cities with structured tastings in Chicago, New York and Washington. Always the wines

were discussed in relation to their Monterey environment, and information on the new wine region

grew apace with the reputation of its wines.

It was a fortunate circumstance that the early release of Monterey white wines coincided with the national switch to white wine drinking. Monterey had much to offer. Its fame spread rapidly.

Now Monterey reds, with a few years of oak aging behind them, and coming onto the market. They are showing the same intense flavors evidenced by the whites.

The Council's group tastings now include at least as many reds as whites. Its activities are due to spread to new areas in 1980 with tentative plans for tastings in at least four Eastern and Southern cities.

As Monterey's recognition grew and the information program expanded, Council members sought assistance from their suppliers in spreading the good word even farther. Associate membership, part of the original plan on incorporation, but not fully implemented until 1978-79, now became a major project, and suppliers entered into active partnership with growers and winemakers to spread the fame of the grapes and wines from Monterey.

On the fifth anniversary of its founding, the Council has 21 active members (12 wineries, 9 vineyards) and 29 associate members representing businesses allied with the industry — a formidable task force dedicated to telling the Monterey story.

Migration to Monterey

by RICHARD PAUL HINKLE

In 1960, when the tiny Chalone winery was founded in Monterey County, California, and three other California wineries began looking toward Monterey as a land of salvation, the grapevine in Monterey County had little in the way of ancestry.

By the end of the sixties the county had less than 2,000 acres of vineland. But the following ten years looked like a vinous Gold Rush. Thousands of acres were planted each year through the early seventies, and by the end of the decade nearly 34,000 acres of grapevines dotted Monterey benchlands. The county, which now has almost half again as many vines as either Napa or Sonoma County, had exploded.

Unlike the three Magi, whose journey was guided by a star, the three wineries that looked toward Monterey in 1960 were pushed from comfortable nests by the steady encroachment of housing developments and were guided by scientific studies. The Santa Clara Valley had been an agricultural sanctuary for Mirassou and Paul Masson for better than a century. And the gravelly soils of the Livermore Valley had been Wente's home since 1883. But each knew that they would have to migrate south if they were to be sure of continuing grape supplies.

A hotbed of political activity in its earliest years, Monterey was later content to quietly establish itself as California's "Salad Bowl." Today, driving El Camino Real ("The King's Highway," U.S. 101) through the Salinas Valley, one sees and feels the ever-present mist from sprinklers as "controlled rainfall" sprinkles on lettuce, strawberries, celery, tomatoes, and artichokes. And now grapes.

The groundwork for the migration to Monterey was laid in the late thirties by University of California professors A. J. Winkler and Maynard Amerine. Their extensive research led to a system of classifying California grape-growing regions by climate. According to their report, published in 1944, Monterey County possessed the two coolest of the five possible grapegrowing climates. What with the war, though, and a subsequent depression in grape prices, few people cared that Monterey's climate might be similar to that of Burgundy or Bordeaux.

But by 1960, urban sprawl in the San Francisco Bay area began to reach even the outlying areas. Orchards of fruit and nut trees were swallowed whole by housing subdivisions. John F. Kennedy hadn't been president a full year when the Mirassous began planting vines near

Soledad. The following year Paul Masson planted 1,000 acres east of Soledad—their Pinnacles Vineyard—and the Wente family put in their Arroyo Seco Vineyard west of Greenfield. By the end of the sixties the rush was on.

Geographically, the region is best understood by considering it as a mirror image of the Napa Valley. The Salinas Valley, like its northern counterpart, lies on a northwest to southeast diagonal. In the Napa Valley, the southernmost Carneros district, next to San Pablo Bay, is the coolest area. In Monterey the reverse is true. Monterey Bay extends its foggy morning coverlet over the northernmost reaches of the Salinas Valley, leaving artichokes and asparagus glistening with dew.

Thus the earliest-ripening grapes are planted around Chualar and Gonzales, in the northern part of the valley—varieties like Pinot Noir, Chardonnay, and Gewürztraminer. There has been much talk comparing northern Monterey to Burgundy. Indeed, there are those who feel strongly that the peripatetic Pinot Noir will at last find its California home here.

Farther south in the Salinas Valley the Bordeaux grape varieties flourish—the Cabernets and the Sauvignon Blancs. It was assumed that Merlot would also do well here, but the variety has shown a marked lack of vigor in Monterey soils. As one farm adviser jokes, "Merlot should be called 'Mer-little' in Monterey."

Following the Camino Real farther south, the warmest grapegrowing region lies southeast of King City, where hearty reds like Zinfandel, Barbera, and Petite Sirah thrive. One of the values in the marketplace today is San Martin's 1975 Monterey (King City) Petite Sirah (about \$4). Its deep, rounded nose gives way gracefully to a rich taste like that of spiced dried cherries.

Monterey's initial viticultural development in the sixties was started by wineries outside the county. Mirassou, Masson, and Wente were followed by San Martin and Almadén. Then in 1972, Bernard Turgeon and Jerry Lohr started planting their Greenfield Vineyards and established their winery in the former Falstaff brewery in downtown San Jose. Large agricultural management companies were responsible for a good portion of Monterey's boisterous growth in the early seventies. Several companies now operate more than a thousand acres each, and one controls 8,500 acres of vines.

The measure of success of any viticultural area may be
(continued on page 20)

gauged by its winery development. In this respect Monterey remained woefully lacking until the middle seventies. In 1974 the Monterey Vineyard erected an elegant two-million-gallon winery—with plans in their pockets for doubling its size—predicated upon numerous vineyard partnerships which controlled nearly 10,000 acres of vines. It appeared that the founders of the Monterey Vineyard were trying to make up for lost time with one impressive effort: they seemed to be building the only winery the county would ever need.

The unforeseen and precipitous drop in grape prices over the next couple of years nearly sank the clipper ship that then graced the Monterey Vineyard's label (which has since been redesigned). Yet the wines were quite good and always represented good value. In this instance it was the "captain"—president and winemaker Richard G. Peterson—who kept the ship afloat through financial high seas, until Wine Spectrum, a subsidiary of Coca-Cola, bought the winery in 1977.

Chalone, for fourteen vintages the only bottling winery in Monterey County, is carefully ensconced in the shadows of the jagged rock formations known as the Pinnacles. The winery is known for its Burgundian rendering of Pinot Noir and Chardonnay, made from grapes grown where thin chalk soils and the scarcity of water often limit production to two barrels of wine per acre.

While the Monterey Vineyard was testing the waters in the seventies, there were others who became convinced that Monterey's future was a sound one. They also built wineries, following the lead of Chalone, as well as the Monterey Vineyard and Paul Masson (which had built a non-bottling winery at Soledad in 1967 to process grapes from their Monterey holdings, now nearly 4,500 acres worth).

The Monterey Peninsula Winery, founded by a pair of dentists, joined the small roster in 1974. Founders Roy Thomas and Dick Nuckton have since been engrossed in discovering just how many interesting things can be done with Zinfandel.

In 1977 William W. Durney reworked a dairy barn to start a winery at his Carmel Valley ranch, where he had been growing grapes and running cattle since 1968. A noteworthy product of his first vintage is the Durney Vineyards Chenin Blanc, a dry, fruity wine.

That same year stockbroker Fred Crummey and schoolteacher Bob Eyerman founded the Carmel Bay Winery "to get [their] hobby out of the garage"; out of the garage and into an abandoned navy hangar at the Monterey Airport, where they concentrate on Zinfandel.

The 1978 vintage saw two new commercial wineries evolving out of what had been solely grapegrowing operations. Ventana Vineyards is owned and operated by J. Douglas Meador, who hopes soon to see "boutique wineries scattered around Monterey County." And the foundation for Jekel Vineyards was a family-owned vineyard just west of Greenfield, planted in 1972.

That Monterey is a unique viticultural area is attested to by Richard Peterson: "Monterey is such an unusual region, with so many differences from the rest of coastal California, that it's difficult to describe it as we see it without fear of being accused of exaggerating. It has the coolest climate (in its northern part), the driest climate,

the most wind, the worst bird problem, the lowest yields, the longest growing season, and large areas of the lightest soils for winegrowing in coastal California."

Save for the winds and the birds, such conditions are pluses when it comes to wine quality. Fencing and wind-breaks of eucalyptus trees have helped mitigate the effects of gales blowing off Monterey Bay. The birds are a more difficult matter. Whereas in Napa and Sonoma most of the harvest is complete by the time flocks of migrating starlings and linnets reach the vineyards, in Monterey the harvest is just getting under way.

Birds notwithstanding, the longer a grape is on the vine the greater its flavor. In Monterey, the harvest is always a month later than anywhere else. One of Peterson's first Monterey wines serves as a good example. It is the 1974 "December Harvest" Zinfandel, which took longer to mature than expected. So long, in fact, that the grapes were not picked until December 6. The wine? Thick and lusty with fruit, and long on character.

It used to be a local joke that Monterey would one day pick the first grapes of a vintage—on January 1. That's no longer a joke. On January 2, 1979, Dick Peterson picked forty-five tons of Napa Gamay at 25.7 Brix (a measure of sugar content). Though the grapes were grown in the 1978 season, the law defines vintage by the year of the harvest. Thus, the Monterey Vineyard's "1979 Gamay" is the first wine of the 1979 vintage.

The most talked-about problem Monterey has thus far encountered has been dubbed "the Monterey Stench." The more charitable refer to it as "Monterey veggie." In short, certain varieties—notably Cabernet Sauvignon and Sauvignon Blanc—were picking up *so much* varietal character that the wines had a pronounced "vegetative" taste (as Cabernet Sauvignon and Sauvignon Blanc both have an acid flavor component identical to bell peppers). Trial and error showed that irrigation too late into the season and the failure to allow the grapes to ripen fully were largely responsible.

Botrytis cinerea, "noble rot," is an established resident in Monterey. Warm summer days, tempered by evening's moist coastal flow of air, provide ideal conditions for its growth. Highly desirable in White Riesling, Semillon, and Sauvignon Blanc, botrytis poses a distinct threat to Chardonnay and Chenin Blanc, which thus require retardant sprays. Wente Brothers was the first winery to produce botrytised wines from Monterey, starting in 1969. More recently, the Monterey Vineyard has released a succulent, honeyed Sauvignon Blanc affected with botrytis.

It was expected that Monterey would have growing pains. Its new problems required new solutions. Low natural rainfall brought sophisticated irrigation systems. "Monterey veggie" focused attention on grape maturity. Varieties planted in the wrong places had to be grafted onto more suitable varieties. Vast, flat vineyards are often mechanically harvested and grapes are even field-crushed, following pioneering work done by Peter Mirassou.

What is astonishing is that in only two decades Monterey has taken a place alongside the most important winegrowing regions of California. The migration of prestigious wineries into Steinbeck country seems now to have slowed. It has been replaced by a reverse flow: the shipment of distinctively flavored wines out of Monterey. Look for them. You'll be flavorfully surprised. □

The Evening Bulletin
 Providence, R.I.
 500 South Main Street

MAY 7 1980

Farming, real estate and winemaking

Your wine By DONALD BREED

When the Monterey Winegrowers Council came tooston last week to show some wines, the emphasis was on "growers." Not that the wines weren't good; most of them were marvelous. It's that the speakers with the most passion were the ones who nurture the grapes from bud break up to harvest, and we members of the press were reminded again just how much of winemaking is farming.

Perhaps this is more true in Monterey County than elsewhere. It is a relatively new viticultural region where grapevines could not survive without irrigation. This allows a kind of fine tuning not possible (or necessary) in other places.

"You fly by the seat of your pants," said Terrel West of Arroyo Seco Vineyards near Greenfield, as he talked about the hard decisions of when to turn the sprinklers on and for how long. When it comes to water control, most other growers in the world just have to pray.

Peter Mirassou, the member of the family who's in charge of the vineyards, said that they've learned that the vines — which can reach down 15 feet into the ground — don't need as much water as they'd thought. So they are irrigating less, but this means less leaf cover, and if the weather in September is hotter than expected the grapes can be sunburned. "You're playing with dynamite," said Mirassou.

IT'S A COMMENTARY on the newness of the region: that the Mirassous are called "pioneers" because they've been there 20 years. Tract housing crowded out their vineyards in Santa Clara County, as it did Wentes Brothers' in Livermore, where the winery was founded in 1883.

"We had to decide whether we were going to be in the real estate business or in stay in winemaking," said Jean Wente, who is president of the council, treasurer of the winery, and mother of the current Wente brothers.

It was the Mirassous, mainly, who had to hear complaints about the "bell pepper" quality of the Cabernet Sauvignon from Monterey County. In 1976, French researchers discovered that a compound called 2-methoxy, 3-isobutyl pyrazine is a flavor component of both Cabernet Sauvignon grapes and bell peppers (Kodak has synthesized the compound, and you can buy the flavor of one million bell peppers in a one-gram container costing \$28.35.) So it wasn't that Monterey Cabernet had foreign flavors but that it was too much of the real thing.

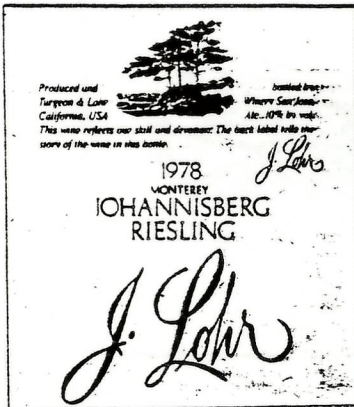
The solution, as it turned out, lay with the viticulture side of winemaking rather than enology — farming, again.

IT IS THE cool climate of Monterey County that results in wines with intense varietal qualities. This is generally a good thing, but Dr. Richard Peterson of the Monterey Vineyards in the northern part of the county said it's been demonstrated to him that they must stick with the grapes that do well in that environment. "Everyone in California thought they had to plant every grape," he said.

The grapes that do best are the cool-climate ones: Riesling (White Riesling or Johannisberg Riesling) of Germany; Gewurztraminer of Germany and Alsace; and Chardonnay, Pinot Blanc and Pinot Noir of Burgundy.

Farther down in Monterey County, the climate is warmer, and they can successfully grow other grapes.

THE RIESLINGS were the ones that impressed me most at the tasting. They were characterized by



intense fruit that billowed up from the glass in a delightful aroma, and by high residual sugar properly balanced with acid. The balance is good enough, in fact, that these Rieslings are now popular on restaurant menus in California.

The American palate, en masse, prefers sweet, soft, "mellow" wines, but there is a substantial segment that disdains anything sweet. Now this only-dry group is learning that even if it has 2½ percent residual sugar, a wine with proper acid balance can go well with food. At last week's lunch, the two Rieslings went better with the lobster bisque than any of the other whites.

The one I like better was J. Lohr, 1978, whose vineyards are in Greenfield. The wine is available in Massachusetts but not, as yet, in Rhode Island.

The other had been in the bottle for only two weeks, and would probably be even better than it was if allowed proper rest. It was made by Jekel Vineyard, also of Greenfield, and was 2 percent residual sugar and 10.3 percent alcohol. The grapes, picked Oct. 20 last year, had been partly affected by botrytis cinerea (noble rot). The owner of the winery is also a filmmaker, and you are more likely to see one of his movies than drink his wines since his vineyard is only 140 acres.

WENTE BROS. brought its 1978 Pinot Blanc from the Arroyo Seco area of the county. It has a nice big bouquet, and a pleasant, crisp flavor with good body. There was no oak apparent.

Paul Masson's estate-bottled Chardonnay, 1978, Pinacles Selection, had been aged in small French oak casks, but carefully monitored to avoid excessive wood. Oak was not apparent in the nose, which was not particularly aromatic. Once in the mouth, you could pick up the oak, and the flavor was full and nice. It was nicely balanced with a good finish.

Gewurztraminer is a varietal that in California tends to be softer and less bitter than the Alsatian types. Monterey Vineyard's 1978 Gewurztraminer was even more delicate and less spicy than many from California — a surprise, since I expected a more intense varietal quality. This is not a Gewurz you'd pick for Szechuan food, but you'd enjoy it with less assertive dishes.

THE REDS from Monterey County showed a range of styles, and it's apparent that more experimenting is still going on with them.

Mirassou brought out its 1977 unfiltered Zinfandel,

which has high (14.4 percent) alcohol because, as Peter Mirassou explained, they "kept the grapes on the vines" to wait for acids to come down to acceptable levels, and sugars built up. Letting grapes sit on vines is an option in the relatively dry Monterey County that many winemakers don't have.

This wine had a big Zinfandel nose with much fruit, body and flavor. Peter Mirassou thinks it will last a great many years.

THERE WERE three quite different Cabernet Sauvignous.

First was Almaden's Monterey, 1977, which recently won a blind tasting conducted by the Los Angeles Times. I found it had a good nose with moderate varietal quality, but not a lot of fruit. It was young and tannic, but not oak-and did not have the eucalyptus quality of many Monterey reds. It was a sound, well-made Cabernet — workmanlike but not exciting. The price is excellent: \$4.39. And Almaden will get it in

your stores; it won't be just something to read about.

Monterey Peninsula Winery had another 1977 Cabernet that was inky purple and so very heavy and tannic that you assumed it would take years to enjoy or understand. Oddly enough, it opened in the glass so much that it became quite enjoyable, except that the heavy fruitiness seemed partly displaced by sweetness. It was made 100 percent from grapes purchased from Terrel West's Arroyo Seco vineyards and was aged in Wisconsin oak.

Finally, there was a 1977 Cabernet by Duirney Vineyard, which is in the Carmel Valley, removed from most of the Monterey spreads. This did not seem young, in fact it was ready to be drunk and enjoyed right then. There was an oaky quality, plus a softness unlike those Cabernets that are best taken straight to the cellar and forgotten for a few years.

We were served scrod for the main course, so I tested out the theory that red wine will go with fish. This time, at least, it worked.

WINE BY BARBARA ENSRUD

The fastest growing California wine region

CALIFORNIA'S sprawling central coast wine regions stretch from south of San Francisco Bay to the Santa Ynez Valley, just north of Santa Barbara. The largest and most concentrated part of it for wine grapes is Monterey County, a broad, dry plain over 100 miles long. Most of the vineyards lie either side of Highway 101 between Chualar and San Lucas—green patches on the flat of the valley floor or hugging up against the foothills of the Santa Lucia mountains that border the Pacific. A few also lie on the high plateaus of the Gavilan range on the eastern side of the valley.

Monterey is the fastest-growing of California's wine regions. In 1970, there were fewer than 2,000 acres of vineyards. Today there are 34,000. University of California scientists touted it as an excellent growing region some years ago, but as yet only a handful of wineries are actually sited there. The region was pioneered by such well-established names as Mirassou, who first planted vineyards in 1961, soon followed by Wente Bros., Paul Masson and Almaden.

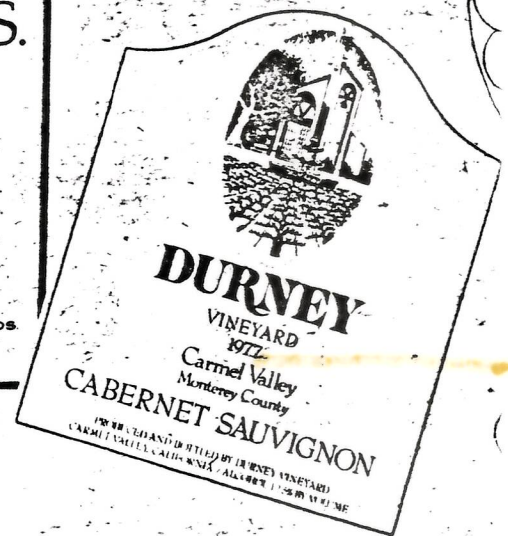
It is one of California's coolest regions, swept by ocean breezes from Monterey Bay that moderate the heat of the same sun that bakes the inland valleys. Fast-draining sandy soil assures low yields and discourages phylloxera, the plant louse that loves to nibble on vine roots and once destroyed vineyards all over the world. Most of Monterey's vines grow on their own rootstocks instead of being grafted onto phylloxera-resistant stock elsewhere in California and the rest of the world.

This may be one of the factors that accounts for the intense way Monterey wines taste of their grape variety. Another is the very long growing season that extends the harvest into December for some varieties. Rainfall is scant, so the vines are irrigated from wells that tap the water tables of the mostly underground Salinas River. High acidity and good sugar levels are another indication of the region's potential.

THERE ARE TWO sides to every coin, however, and some of the advantages of the Monterey region are offset by certain problems. High acidity has made some red wines from Monterey seem harsh and tart. Peter Mirassou, manager of Mirassou vineyards, feels that leaving red varieties to ripen longer is perhaps the answer here. As the grapes ripen and sugar increases, the level of acidity begins to drop. Mirassou's 1977 zinfandel, harvested late in '77, and subsequent vintages show much better balance than zinfandels of former years. Mirassou also discovered that over-irrigation seemed to contribute to the exaggerated vegetal flavors in red wines that some winelovers found objectionable. One by one the problems that this untried area presented to growers seem to be disappearing, due to the tireless efforts and acute observations of men like Peter Mirassou and Dick Peterson of The Monterey Vineyard.

Monterey is now producing some superb wines, especially from white varieties such as riesling, sauvignon blanc and pinot blanc. Recently several members of the Monterey Winegrowers Council, an organization of 21 growers and wineries, were in New York to introduce their latest releases. Among them were several notable wines that should give you some idea of Monterey's capabilities and potential.

Wente Bros. 1978 pinot blanc, \$4.55. A very full, rich dry white wine, pale chartreuse in color, crisp, well-balanced, a superb choice with seafood or light veal dishes. **Paul Masson 1978 chardonnay, Pinnacles Selection, \$5.75.** One of the lighter chardonnays with an appealing hint of citrus flavors and fresh, clean aftertaste. Excellent value.



Jekel Vineyards 1979 Johannisberg riesling, \$7.50. A delicate suggestion of orange blossoms in both aroma and flavor, but as the wine opens up it's like walking through a blooming grove. A delightful, lightly sweet, Mosel-like wine, superb balanced with natural acidity and only 10.3% alcohol. From a new winery in Monterey that also produces fine chardonnay.

J. Lohr 1978 Johannisberg riesling, \$6. Another wine in the Germanic style, light-bodied (10% alcohol), fruity but very elegant. Slightly sweeter than the Jekel but higher acidity balances it out nicely. Clearly, Monterey gives superb wines from the riesling grape.

Mirassou 1977 zinfandel, \$4.95. Innovative Peter Mirassou is the skilled vineyardist who pioneered in Monterey with mechanical harvesting and field crushing of grapes for maximum freshness and forestalling oxidation. This unfiltered 1977 zinfandel is big, rich and full of concentrated fruit that can well handle robust dishes at this stage of its evolution. But Mirassou predicts that it is six years away from its full potential if properly stored.

Almaden 1977 Monterey cabernet sauvignon, \$4.59. Dark garnet in color and aged 14 months in American oak barrels, this 100% cabernet was the lightest of the three cabernets presented. It is fruity, well-balanced, excellent value for current drinking and certainly one of Almaden's best cabernets to date.

Durney 1977 cabernet sauvignon, \$9.99. Of the three Monterey cabernets, this one from the Carmel Valley in the northern part of the county was the most classic in style, drier, somewhat more astringent, more Bordeaux-ish. A very well-made wine and one I would lay away for a couple of years to let it evolve more fully.

At Wente's Arroyo Seco vineyard, said manager Ralph Riva, they irrigate only five times per season, adding some 15-20 inches to winter's stingy average rainfall of eight inches.

In short, there has been no single "cure" for the early problems encountered in Monterey winегrowing. Several remedies have been used. But two basic approaches have emerged.

The Mirassous fine-tuned their practices both in the vineyards and in the winery: less water, more sunlight, lower fermentation temperatures, etc.

Dick Peterson's approach is more draconian, and seems to be more widely practiced: If the variety is not comfortable in its microclimate, bud it over to another variety. He enforced this conclusion by cancelling contracts with Cabernet growers in the north end of the county.

Thousands of acres of vines in Monterey County have been budded over in the past few years, principally from red varieties to white. Turgeon & Lohr, said Bernard Turgeon, found that its Zinfandel "maybe one year out of five would get enough heat to ripen." They budded over to Pinot Noir, Chardonnay and Johannisberg Riesling. In Salinas-area vineyards Rich Smith manages, Cabernet and Merlot were budded over to Sylvaner, Gewurztraminer and Pinot Blanc.

Some of the change has been wholesale, some more cautious.

At Masson, for instance, vineyardist Scheiderman commented that "We haven't gotten carried away with T-budding. We do maybe 30 acres a year. We want to see what they'll taste like five-six years from now."

Most growers prefer to change varieties by T-budding rather than uprooting and planting new vines. If a T-budding takes, the vine produces a slim crop the next year and a near-normal yield the year after. But it can be five or six years to full harvest for a newly planted vine.

Don't get the impression from reading this account that the Monterey history to date has been all problems and no successes. Some outstanding wines have been produced, especially when the grape variety and the microclimate match.

There have been some fine Rieslings and Gewurztraminers from the cooler northern end of the county, for example, and excellent Cabernets from the south. Chardonnay seems less fussy, and does well over wide areas of the county.

The "noble rot," the fungus *Botrytis* which dehydrates grapes and facilitates making intensely sweet wines, occurs naturally in parts of Monterey County. The Wentes made a "spatlese" style Riesling from Arroyo Seco as early as 1969, for example. The Monterey Vineyard, Mirassou and others have produced their own spectacular examples. I recently sampled ex-

In Fernandina Beach

Outstanding California List Earns Kudos for Walker's Surf Restaurant

I hardly can claim to have "discovered" Bill Walker and his **Surf Seafood Restaurant** in Fernandina Beach, Florida. The

Monterey

tremely limited production J. Lohr 1979 Rieslings which are comparable to German *ausleses* and *beerenausleses*.

"I tell everybody Monterey is going to be the Pinot Noir capital of California," boasted Dick Peterson. He admits he has not yet achieved the model. (Tiny Chalone Vineyard, on a mountainside in the Pinnacles National Monument area, convinced me many years ago what Pinot Noir can do in the area. Unfortunately, Chalone is hard to find in this part of the country.)

To sum up, in a brief and sometimes hectic 20 years, Monterey County has established itself as one of California's finest wine-making areas. Its wines are distinctive. Its climate and its consequent long growing season tend to yield intense varietal flavors. Its growers and winemakers rapidly seem to be sorting out where to grow what grapes, and how to treat them in the winery.

Piper Heidsieck Joins Sonoma in Champenoise

The French Champagne house of Piper-Heidsieck has joined its competitor Moet-Hennessy in making sparkling wine in California. Moet-Hennessy established its beachhead (vineyardhead?) in the early Seventies by creating a new company, Domaine Chandon, in the Napa Valley. Piper-Heidsieck is combining forces with Sonoma Vineyards.

Sonoma already has been producing excellent sparkling wine on a small scale, but the infusion of Piper-Heidsieck money will mean a separate, well-equipped, large-scale facility adjacent to the present winery. There also will be a restaurant (Domaine Chandon has one, too) and museum.

The new label will be Piper-Sonoma, and grapes will come from vineyards which are similar to those of Champagne's cool, chalky territory. Production will be *Methode Champenoise* (fermented and finished in individual bottles), as Sonoma's already are. But you can be sure the label will not say "Champagne," since French law decrees that can come only from the Champagne district.

A first cuvee of some 30,000 cases will be produced this fall, but production is expected to be many times greater in the future.

Surf's remarkable wine list already has received attention in various newspapers, wine reports and *Brown's Guide to Georgia*. And earlier this year, the prestigious, nationally organized Knights of the Vine formally cited Bill Walker for "the most outstanding efforts by an individual for the promotion of American wines."

But I am pleased to salute Walker and The Surf in this first of what will be a regular **WINEWS** feature on exceptional wine lists in the South.

Bill recently reminded me that I can take at least some very oblique credit for his achievement: He read my magazine wine columns when he first was growing interested in the subject in the early Seventies. But his interest quickly raced past the output of any writer. His knowledge of wines — from California, in particular — has the depth that can come only with consistent, joyful sampling as well as reading and visiting the wineries.



What makes The Surf's list extraordinary? First, it is huge: some 273 labels on the list revised in August, 1980. (And that, says Walker, is about as big as he wants it to grow.)

Second, it is incredibly low-priced for a restaurant. Whereas I almost have become inured to restaurant prices which are as much as three times retail store norms, The Surf's are in the retail range. (Walker has a retail license and sells wines to take off premises.)

Third, it is an elegant selection of California's finest labels. In fact, my only criticism is that it doesn't have enough ordinary labels.

Walker has done more than recognize and order wines of high quality. He has been instrumental in bringing in previously unavailable labels. (The paper work for new labels is tedious, so that's no small achievement.) To cite just one example, I have hoped since I first sampled it nine years ago that the Chalone label (from a mountainside in Monterey County) would be available in Atlanta. The Chalone people themselves once told me production was so limited that

UNIVERSITY OF CALIFORNIA

RESEARCH LEADS TO DEVELOPMENT OF NEW WINE COUNTRY

The opening of California's new coastal fine grape district, the upper Salinas Valley in Monterey County, took place on October 28th in the presence of California's leading vintners, University of California scientists, and various County officials at the 1000-acre Paul Masson Pinnacles Vineyard near Soledad.

The celebration, marking the first harvest of 14 premium grape varieties from 425,000 pedigreed vines planted there four years earlier, was a tribute to the University's viticulturists whose research inspired the multi-million-dollar venture in the valley long known as "the Salad Bowl of America."

Present to be officially honored by the Monterey Board of Supervisors and by the wine industry were U. C. President Clark Kerr, Chancellor Emil Mrak of the College of Agriculture at Davis, Viticulturist Albert J. Winkler, Enologist Dr. Maynard Amerine, and members of the University's Department of Viticulture and Enology. It was Dr. Winkler and his staff who, in a search begun 30 years ago for new areas in the State capable of producing the shy-bearing delicate grapes for fine table wines and champagnes, found the Salinas climate ideally suited and recommended grape planting there.

The successful harvest of Chardonnay, Riesling, Cabernet Sauvignon, Pinot Noir and other rare "varietal" grapes represents the first time in more than a century that a new vineyard area has been added to the coastal fine wine district of California. For 130 years, while Santa Clara, Alameda, Sonoma, Napa and other counties neighboring San Francisco Bay were winning world fame for their superior wines, owed to their ideal climate, Monterey County was bypassed completely because of its sparse 10-inch annual rainfall.

When the University's years of research proved by precise temperature measurements that the upper Salinas Valley possessed the same sunny but cool climate as the other coast countries, three leading California winegrowers, Paul Masson Vineyards of Saratoga, Mirassou Vineyards of San Jose and Wentz Bros. of Livermore, became interested. In 1962, convinced by their own studies that the University was right, and looking for new vineyard land beyond the Bay Area where urbanization threatens existing farms, these producers acquired large acreages in the valley and began planting grapes there. They installed more than 100 miles of overhead sprinkler lines to



Pedigreed grapevines in Paul Masson's 1,000-acre Pinnacles Vineyard in Monterey County get rain whenever they need it. Photo shows one of the vineyard's 13,500 overhead sprinklers which are fed by 137 miles of underground pipelines, supplied from America's largest submerged stream, the "upside down" Salinas River.

supplement the valley's infrequent rains.

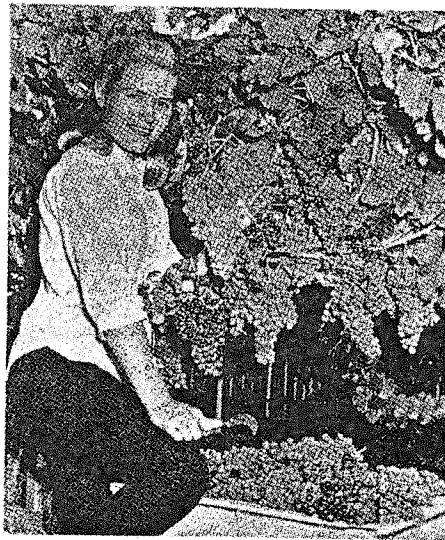
Wine Institute Past President Harry Baccigaluppi of San Francisco, presiding at the luncheon celebration, said the new Monterey County vineyards have made history as the world's first fine wine district to be established as the direct result of scientific temperature research, and that the University of California, which gets credit for the achievement, now leads

all other wine countries in the sciences of viticulture and winemaking.

The vineyards, which promise to transform the region "from Salad Bowl to Champagne Bowl," are located 132 miles south of San Francisco on El Camino Real (the King's Highway), which is U. S. Highway 101. At this point, the Salinas Valley is eight miles wide, sheltered from ocean fogs by the Santa Lucia Mountains on the west. On the east is the Gavilan Range, whose lofty crags and ancient caves comprise the Pinnacles National Monument.

Measurements of the district's climate, in terms of "degree days" of cumulative warmth above 50° Fahrenheit during the growing season, April through October, place it in both Districts I and II, similar to Santa Clara and Napa Counties in California, and between the climates of the Bordeaux and Burgundy districts of France.

Added advantages of the region are that the vineyards are on sloping bench land, high above the valley floor with adequate drainage and freedom from frost. The soil composition is principally Chular and Greenfield coarse sandy loam, consisting of decomposed granite washed down from the Gavilans through the centuries, gravelly and low in lime content like the vineyards of the Medoc and Graves districts of Bordeaux and the better vineyards in the Palatinate.



Clusters of vine-ripened Emerald Riesling grapes are carefully handpicked during the first harvest in California's new coastal fine wine district in the upper Salinas Valley, California.

Soledad Area Could be State's Best for Wine

Although the Napa Valley has already proven itself as a great area for the production of premium wines, there are no reasons to indicate that the Soledad country can not become as good or even better—possibly the best in all of California.

That was the summation of Dr. Albert Winkler, viticulture expert from the University of California at Davis, who spoke before an overflowing crowd of members and guests at a regular membership meeting of the Soledad Mission Chamber of Commerce yesterday noon at the Soledad Inn.

DR. WINKLER explained that

10 years is too short a time to establish the Soledad area as the greatest premium wine producer in all of California.

"I wouldn't want to say that you couldn't do it here, but first I would want to see the proof," Dr. Winkler said in answer to a question from this newspaper.

DR. WINKLER said that Monterey County remains as the only large contiguous area in California for the development of grapes for the production of quality wines with a good range of temperatures and soils rated from excellent to marginal.

And the best part of Monterey County's grape pro-

duction potential is centered around Soledad in the Salinas Valley, Dr. Winkler said.

It was Dr. Winkler who was instrumental in the location of the Paul Masson Winery at Soledad.

"THERE WILL be other wineries in this area," he predicted after reviewing prevalent growing conditions with emphasis on climate (range of temperature, especially) and soil.

Notorious winds of the Salinas Valley were credited by Dr. Winkler for making the area from Chualar to south of King City particularly good for

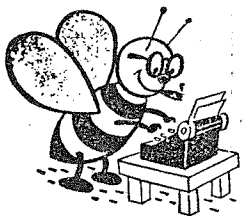
growing grapes to produce premium wines.

He pointed out that about the time of the day the temperature ordinarily would get out of hand the winds come along from the Pacific Ocean to nicely moderate the mercury readings.

"The temperature doesn't get away from you like it does in Napa where last year it got up to 108 which is not fit for quality wines," he said.

Not too far north of Soledad, in the Chualar area, there is danger of wet fog which makes the control of mildew difficult, Dr. Winkler said. South of King City

(Continued on Page 6)



Soledad Bee

\$5.00 Year in Monterey County (\$6.50 Outside) Single Copy: Ten Cents



51st Year

SOLEDAD, CALIFORNIA, WEDNESDAY, APRIL 22, 1970

No. 17

Grapes for Wine

(Continued from Page 1)

there is a greater range in temperatures which, in some areas, is not conducive to growing the best grapes.

Asked about the advisability of planting grapes south of King City, Dr. Winkler said "you ought to get some more information if you were to go as far as San Lucas."

ALL FACTORS considered, Dr. Winkler said "you are right here in the middle of the best situation in Soledad" when it comes to producing grapes for quality wines.

Dr. Winkler was introduced by Ed Friedrich, manager of the Paul Masson Winery, who said the speaker is "the foremost expert of viticulture (growing of grapes) in all of the United States."

In the search for new regions favorable to the production of good and premium table wines, Dr. Winkler said that the climate, or temperature, is the most important factor of all.

SOILS ARE important, he said, but the best quality is limited to areas where the growing temperatures are most constant at the proper levels.

Premium table wines, he said, are favored by grapes grown in relatively cool temperatures when they ripen slowly. On the other hand, spring frosts which are too severe can drastically cut down production.

June temperatures in Soledad average about 65 degrees without a great deal of fluctuation throughout the day, he said.

Besides climate and soil, Dr. Winkler said proximity to wineries and quality of grapes already in production are important considerations before the establishment of new vineyards.

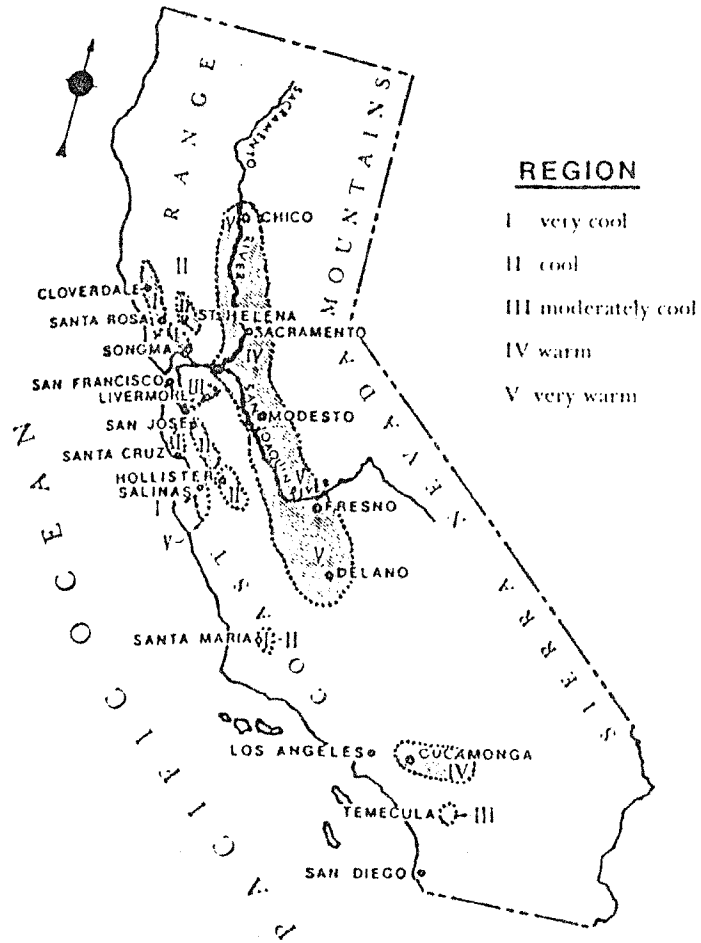
Grapes don't start to grow before the temperature reaches 50 degrees and their quality deteriorates considerably if they ripen at excessive temperatures such as were registered last year at Napa, Dr. Winkler said.

Consistently higher temperatures of the San Joaquin Valley are good for quantity, but these grapes can not produce the quality table wines which come from the Soledad area, Dr. Winkler said.

occasional training classes in each other's schools. SET THIRSDAY, April 30, as a public meeting for the purpose of discussing dress code problem.

EXHIBIT II

WINE REGIONS IN CALIFORNIA



Wine. M. A. Amerine and V. L. Singleton. University of California Press. Berkeley. 1965. Revised 1976. p. 49.

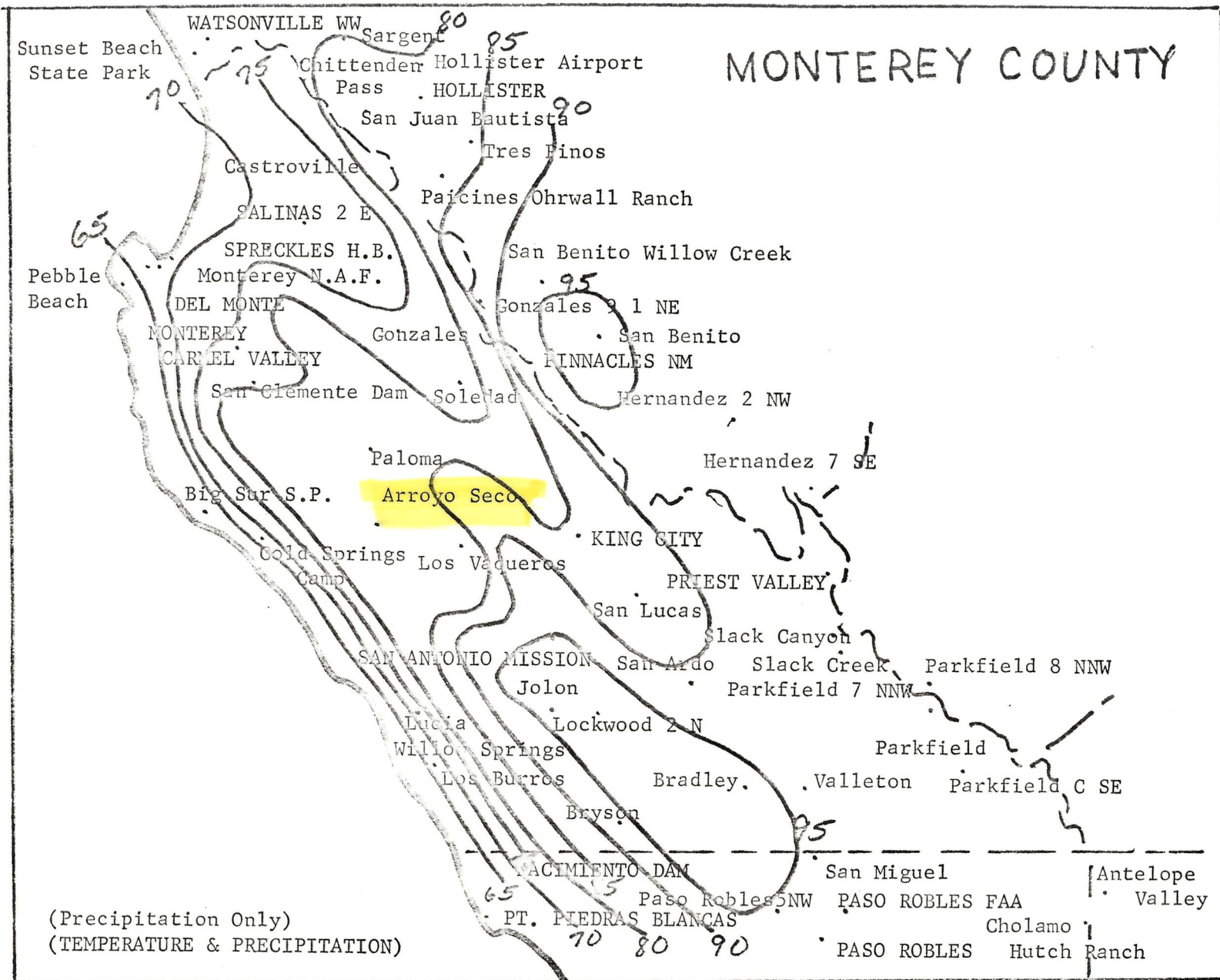


Figure 4. July Mean Maximum Temperature.

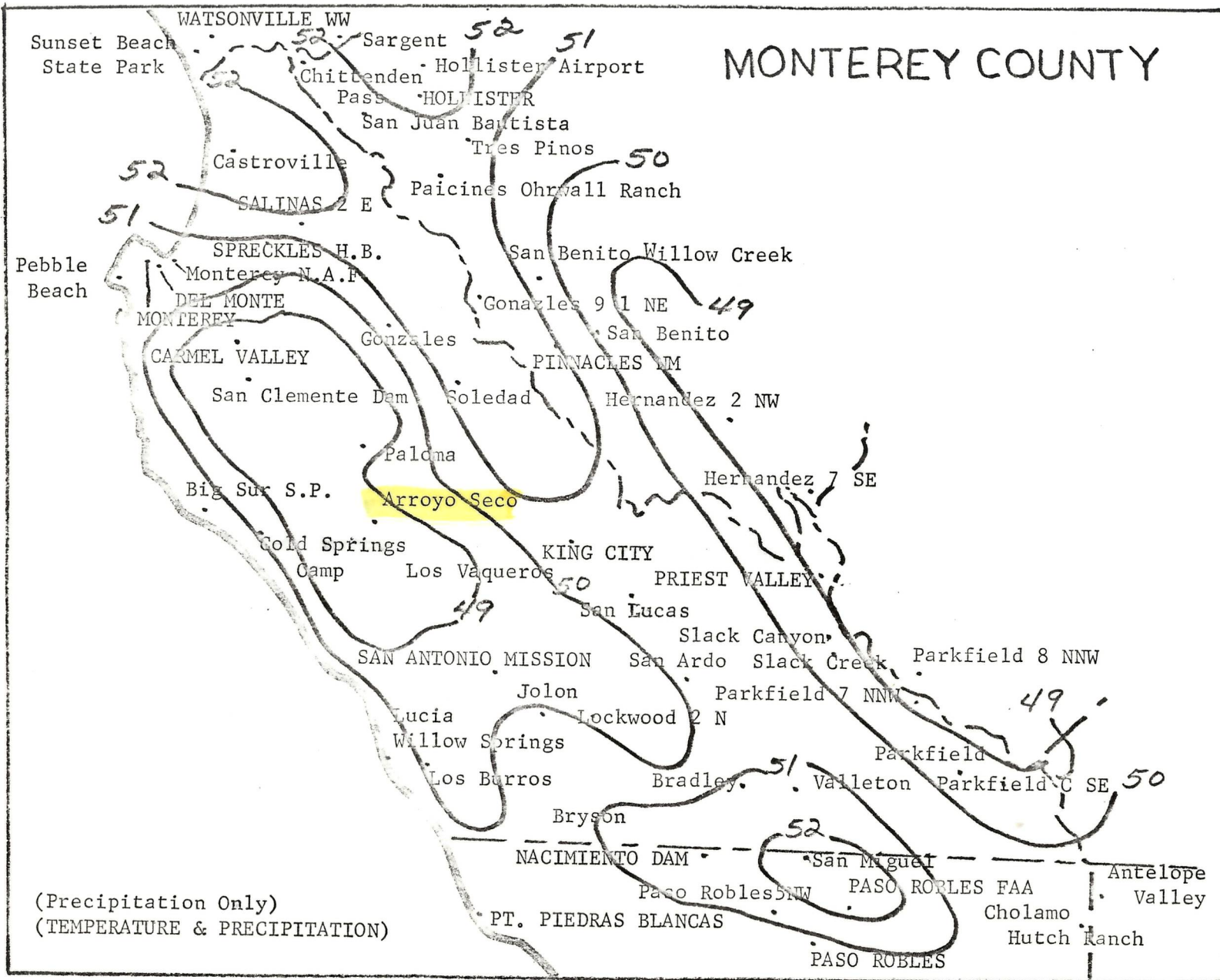


Figure 5. July Mean Minimum Temperature.

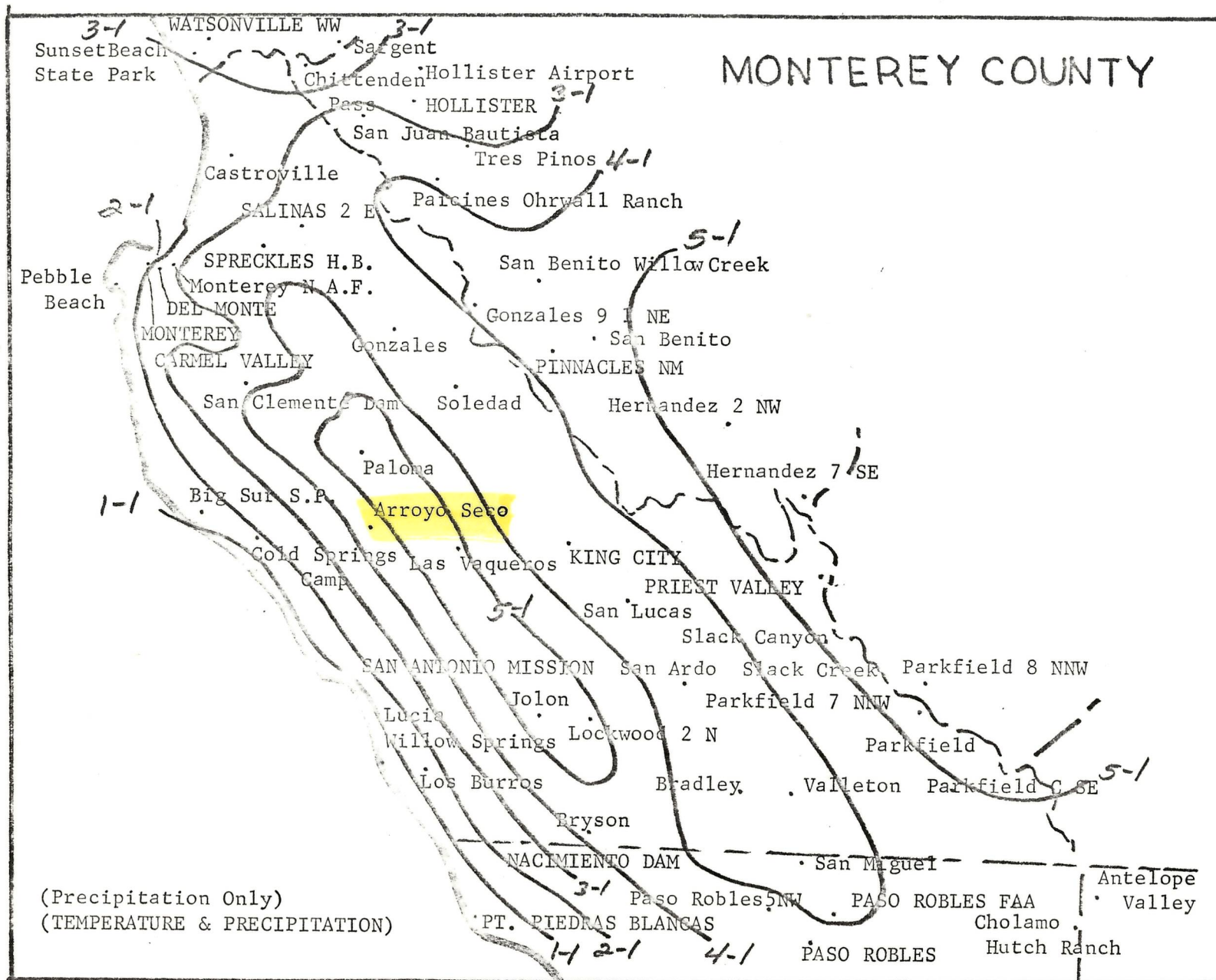


Figure 10. Average Date of Last 32° Freeze in the Spring.

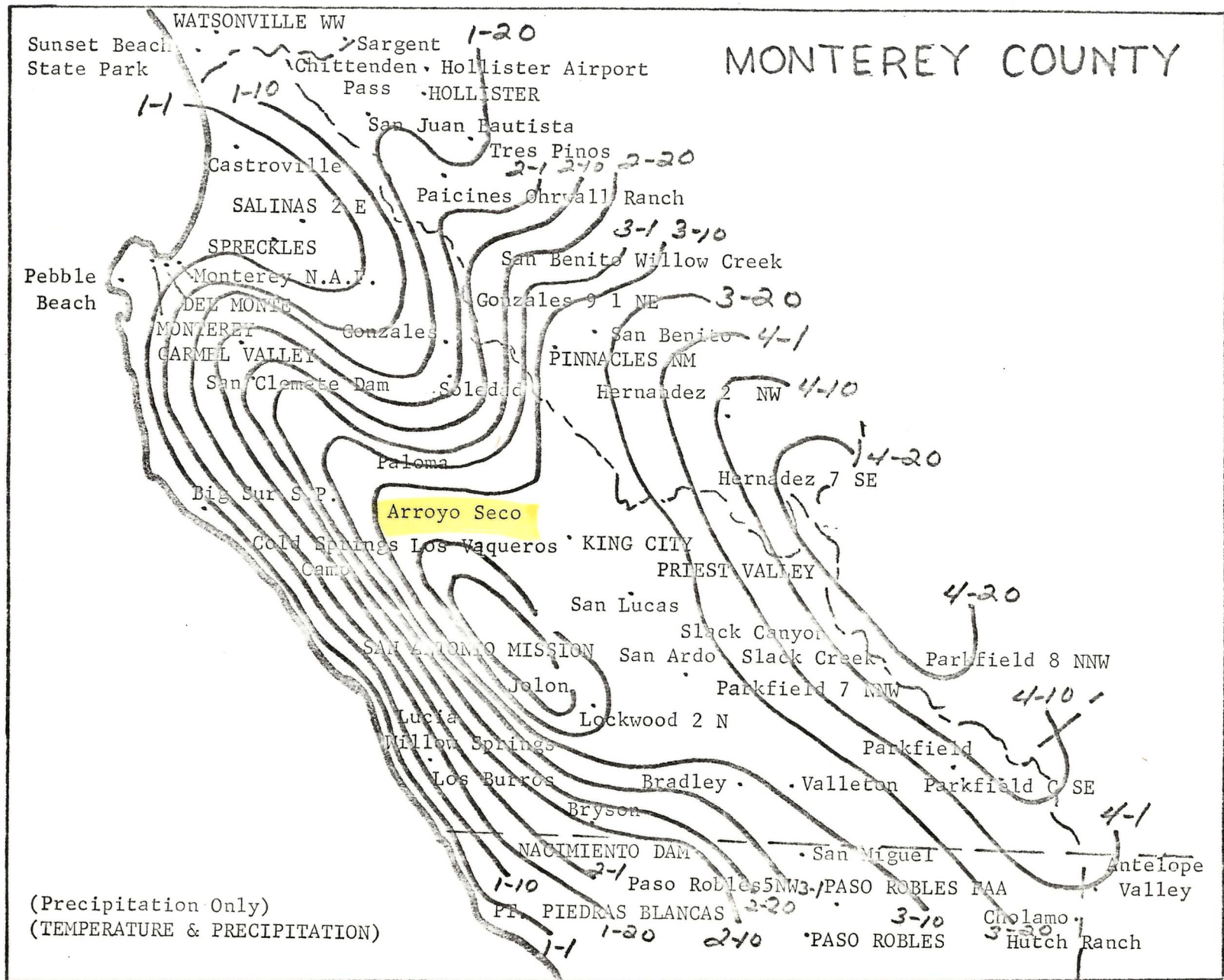


Figure 13. Average Date of Last 28° Freeze in Spring.

soil of sandy loam to sandy clay loam, and areas of strongly sloping to very steep, severely eroded banks or escarpments that have exposed cemented sandy alluvium or sandstone outcrops. Slopes are 9 to 30 percent.

The Santa Ynez soil has an available water capacity of 2 to 4 inches, and some water is held available for plants above the subsoil. Roots can penetrate to a depth of 16 to 24 inches. Runoff is medium to rapid, and the erosion hazard is moderate to high.

This complex is used mostly for military purposes, but some areas are used for range, wildlife habitat, and watershed. Capability unit VIe-1 (15); Arnold soil in Sandy range site, Santa Ynez soil in Claypan range site.

Arroyo Seco Series

The Arroyo Seco series consists of well drained soils that formed in granitic alluvium on alluvial fans and plains. Slopes are 0 to 9 percent. The vegetation is annual grasses and a few scattered oaks. The elevation is 100 to 3,000 feet. The mean annual precipitation is 12 to 30 inches, the mean annual air temperature is 58° to 60° F, and the frost-free season is 210 to 260 days. Summers are hot and dry, and winters are cool and moist.

In a representative profile the surface layer is grayish brown, neutral and mildly alkaline gravelly sandy loam 29 inches thick. The underlying material is brown, mildly alkaline gravelly sandy loam 13 inches thick and yellowish brown, mildly alkaline very gravelly coarse sandy loam.

Permeability is moderately rapid. Most roots can penetrate to a depth of more than 60 inches, but the very gravelly underlying material limits the available water capacity and nutrient storage for some plants.

Arroyo Seco soils are used for irrigated row and field crops, dryland pasture, and dryfarmed grain. A few areas are used for orchards or vineyards.

Representative profile of Arroyo Seco gravelly sandy loam, 0 to 2 percent slopes, 300 feet SW of the town of Greenfield, SW of Greenfield-Arroyo Seco Road intersection, or 375 feet SW of 12th Street, then 500 feet SE on field road and 300 feet SW into field.

Ap—0 to 5 inches; grayish brown (10YR 5/2) gravelly sandy loam, very dark grayish brown (10YR 3/2) when moist; cloddy; slightly hard, very friable, nonsticky and nonplastic; common very fine roots; common very fine interstitial pores; 15 percent gravel, 2 percent cobblestones; neutral; clear smooth boundary.

A12—5 to 18 inches; grayish brown (10YR 5/2) gravelly sandy loam, very dark grayish brown (10YR 3/2) when moist; weak coarse subangular blocky structure; hard, friable, nonsticky and nonplastic; few very fine roots; common very fine tubular and interstitial pores; 20 percent gravel, 5 percent cobblestones; mildly alkaline; gradual wavy boundary.

A13—18 to 29 inches; grayish brown (10YR 5/2) gravelly sandy loam, very dark grayish brown (10YR 3/2) when moist; massive; slightly hard, very friable, slightly sticky and nonplastic; few very fine roots; common very fine tubular pores; 25 percent gravel, 10 percent cobblestones; mildly alkaline; gradual wavy boundary.

C1—29 to 42 inches; brown (10YR 5/3) gravelly sandy loam, dark brown (10YR 3/3) when moist; massive; slightly hard, very friable, nonsticky and

nonplastic; no roots observed; common very fine tubular pores; 25 percent gravel, 10 percent cobblestones; mildly alkaline; abrupt irregular boundary.

IIC2—42 to 60 inches; yellowish brown (10YR 5/4) very gravelly coarse sandy loam, dark yellowish brown (10YR 4/4) when moist; massive; 50 percent gravel, 20 percent cobblestones, 5 percent stones; mildly alkaline.

Coarse fragments make up about 10 to 35 percent of the A horizon. They are typically rounded or angular granitic or schistose gravel or cobblestones. The A horizon is grayish brown, dark gray, dark grayish brown, or brown. The A horizon, if not disturbed by tillage, is massive and slightly hard or has subangular blocky structure and is hard. Reaction is slightly acid to moderately alkaline, and texture is gravelly sandy loam, gravelly fine sandy loam, or gravelly loam.

The C1 horizon is gravelly sandy loam, gravelly fine sandy loam, or gravelly loam. It has 15 to 35 percent gravel and cobblestones. It is brown, grayish brown, yellowish brown, pale brown, or light yellowish brown, and reaction is neutral to moderately alkaline. In some profiles the A horizon rests directly over the IIC horizon at a depth of 40 to 60 inches. The IIC horizon has 50 to 85 percent gravel, cobblestones, and stones.

AsA—Arroyo Seco gravelly sandy loam, 0 to 2 percent slopes. This is a nearly level soil on alluvial fans and plains. It has the profile described as representative of the series.

Included with this soil in mapping were small areas of Hanford, Chualar, Danville, Tujunga, Gorgonio, and Mocho soils. Also included were areas of a soil that is similar to this Arroyo Seco soil, but the gravelly and cobbly substratum is at a depth of about 24 to 40 inches. Areas that have a cobbly surface layer were also included.

Runoff is slow, and the erosion hazard is slight. The available water capacity is 4 to 6 inches and is reduced somewhat by the coarse fragments in the profile, especially in the underlying material.

This soil is used mostly for irrigated row and field crops. Some areas are used for orchards and vineyards. Capability unit IIIs-4 (14); range site not assigned.

AsB—Arroyo Seco gravelly sandy loam, 2 to 5 percent slopes. This is a gently sloping soil on alluvial fans and plains.

Included with this soil in mapping were small areas of Hanford, Elder, Chualar, Danville, and Tujunga soils. Also included were areas where the very gravelly and cobbly substratum is at a depth of 24 to 40 inches and areas that have a cobbly surface layer. On the Hunter-Liggett Military Reservation, areas of Lockwood, Santa Ynez, and Chamise soils were also included.

Runoff is slow, and the erosion hazard is slight. The available water capacity is 4 to 6 inches and is reduced by the coarse fragments in the soil.

This Arroyo Seco soil is used mostly for irrigated row and field crops. A few areas are used for orchards and vineyards or dryfarmed hay and grain. Capability unit IIIe-4 (14); range site not assigned.

AsC—Arroyo Seco gravelly sandy loam, 5 to 9 percent slopes. This is a moderately sloping soil on alluvial fans. It has a profile similar to the one described as representative of the series, but the surface layer is dark gray, a few cobblestone are on the surface, and up to 20 percent cobblestones and stones are throughout the profile.

feet. The mean annual precipitation is 30 to 70 inches, the mean annual air temperature is 51° to 57° F, and the frost-free season is 200 to 300 days. Summers are warm and dry, and winters are cool and moist.

In a representative profile the soil is about 15 inches thick. It is dark grayish brown, slightly acid gravelly loam and brown, medium acid gravelly loam. It is underlain by fractured fine grained sandstone.

Permeability is moderate, and the available water capacity is 1 to 3 inches. The depth to which roots can readily penetrate is 10 to 20 inches, although some roots follow fractures in the bedrock for many feet.

McMullin soils are used for wildlife habitat, watershed, and as a site for military maneuvers.

Representative profile of McMullin gravelly loam in an area of McMullin-Plaskett complex, about 0.1 mile east from the junction of Burma Road and Coast Ridge Road and about 300 feet north from Burma Road, in SW $\frac{1}{4}$ NW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 19, T. 23 S., R. 6 E.

O—1½ inches to 0; litter of leaves and twigs, mainly from scrub interior live oak; slightly acid; abrupt wavy boundary.

A11—0 to 7 inches; dark grayish brown (10YR 4/2) gravelly loam, very dark grayish brown (10YR 3/2) when moist; weak fine and medium crumb structure; soft, very friable, nonsticky and nonplastic; many very fine and few fine and medium roots; many very fine tubular and interstitial pores; 20 percent gravel; slightly acid; gradual wavy boundary.

A12—7 to 15 inches; brown (10YR 5/3) gravelly loam, dark brown (7.5YR 4/2) when moist; weak fine and medium crumb and granular structure; soft, very friable, slightly sticky and slightly plastic; common very fine, few fine, many medium, and common coarse roots; many very fine tubular and interstitial pores; 25 percent gravel; medium acid; clear irregular boundary.

R—15 to 18 inches; light olive gray (5Y 6/2), fractured fine grained sandstone; few fine, medium and coarse roots in fractures; medium acid.

Texture of the A1 horizon is sandy loam, loam, gravelly sandy loam, gravelly loam, or stony loam. The A1 horizon is 7 to 20 inches thick. In some places a B2 horizon or C horizon overlies the fractured bedrock. Depth to bedrock ranges from 10 to 20 inches.

Md—McMullin-Plaskett complex. This mapping unit consists of steep and very steep soils on mountains. These soils were so intermingled that it was not feasible to map them separately at the scale used. Slopes are 30 to 75 percent.

McMullin and Plaskett soils each make up about 35 percent of this complex. The rest consists of small areas of Sur and Millsholm soils; a soil that has a subsoil of clay loam; similar soils that are less than 10 inches deep to bedrock; areas of rock outcrops; and areas of Gilroy soils on ridgetops on the Hunter Liggett military base east of the Nacimiento River.

Runoff is rapid and very rapid, and the erosion hazard is high or very high.

This complex is used mostly for watershed and wildlife habitat. The McMullin soil has moderately low productivity for ponderosa pine (site index averages about 60). The seedling mortality is moderate, and the windthrow hazard is slight. The equipment limitation is severe. The Plaskett soil has low productivity for ponderosa pine (site index about 50). The seedling mortality is moderate, and the windthrow hazard is moderate. The equipment limitation is severe.

Most areas of these soils are used for noncommercial trees such as interior live oak, madrone, and laurel. These species commonly are scrubs. There are a few scattered Coulter pine, knobcone pine, and digger pine. Capability unit VIIe-1 (15); range site not assigned.

Metz Series

The Metz series consists of somewhat excessively drained soils that formed in alluvium that was derived mostly from sedimentary rocks on flood plains and sand dunes. Slopes are 0 to 9 percent. The vegetation consists mainly of annual grasses, forbs, and a few scattered willows and cottonwoods. The elevation is 50 to 500 feet. The mean annual precipitation is 12 to 14 inches, the mean annual air temperature is 58° to 60° F, and the frost-free season is about 260 days. Summers are warm and dry, and winters are cool and moist.

In a representative profile the surface layer is light brownish gray, moderately alkaline fine sandy loam about 12 inches thick. The underlying material is light brownish gray, moderately alkaline, stratified fine sand, sand, and very fine sandy loam extending to a depth of more than 60 inches (fig. 7).

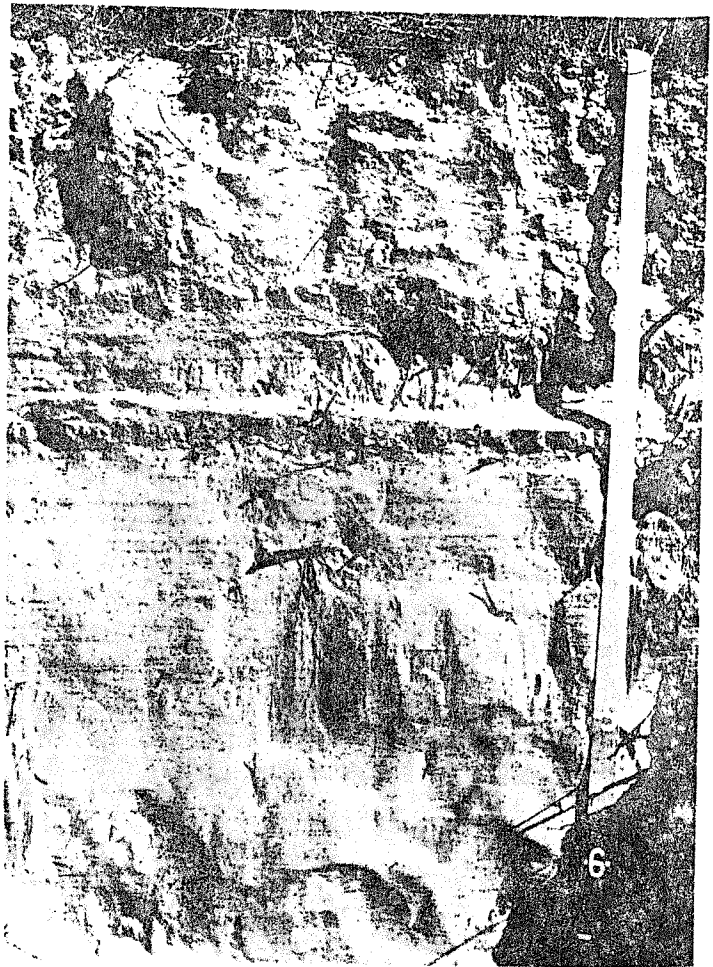


Figure 7.—Profile of a Metz soil. A 2-inch layer of silt is at a depth of 3 feet.

Permeability is moderate, but it becomes rapid at a depth of more than 48 inches in some places. The available water capacity is 4 to 6 inches, depending upon the amount of stratification. Roots penetrate to a depth of more than 60 inches.

Metz soils are mostly used for irrigated row crops, pasture, and range. They have a limited use for dryland grain.

Representative profile of Metz fine sandy loam, about 8 miles southeast of Salinas; from U.S. Highway 101 on Samovia Road, 1.15 miles to end of pavement, 0.65 mile SW on road continuation, 0.2 mile NW on farm road, then 30 feet west and 100 feet north in corner of field.

Ap—0 to 12 inches; light brownish gray (2.5Y 6/2) fine sandy loam, dark grayish brown (2.5Y 4/2) when moist; massive; hard, friable, nonsticky and nonplastic; common very fine roots in the upper 2 inches, few very fine roots below a depth of 2 inches; many very fine interstitial pores and very few fine tubular pores; compacted by tillage; moderately alkaline; abrupt wavy boundary.

C1—12 to 29 inches; light brownish gray (2.5Y 6/2) fine sand, dark grayish brown (2.5Y 4/2) when moist; massive; soft, very friable, nonsticky and nonplastic; very few very fine roots; many very fine interstitial pores; discontinuous sand lenses 1 to 2 inches thick in upper part of horizon; very slightly effervescent; moderately alkaline; clear smooth boundary.

C2—29 to 38 inches; light brownish gray (2.5Y 6/2) sand, grayish brown (2.5Y 5/2) when moist; single grained; loose (dry and moist), nonsticky and nonplastic; very few very fine roots; many very fine interstitial pores; some gravel and lenses of very dark gray silty clay 2 to 5 inches thick that have many very fine and few fine roots; very slightly effervescent; moderately alkaline; gradual smooth boundary.

IIC3—38 to 52 inches; light brownish gray (2.5Y 6/2) very fine sandy loam, olive brown (2.5Y 4/4) when moist; weak coarse prismatic structure; slightly hard, very friable, slightly sticky and slightly plastic; common very fine roots; many very fine interstitial pores and common very fine tubular pores; faint lenses of brown silt loam in the middle of horizon; strongly effervescent with disseminated lime; moderately alkaline; abrupt smooth boundary.

IIC4—52 to 118 inches; light brownish gray (2.5Y 6/2) fine sand, dark grayish brown (2.5Y 4/2) when moist; single grained; loose (dry and moist), nonsticky and nonplastic; no roots observed; many very fine interstitial pores; very slightly effervescent; moderately alkaline.

The A horizon is grayish brown, brown, light brownish gray, pale brown, or light yellowish brown. Texture is sand, loamy sand, fine sandy loam, or silt loam and strata of loam, silt, and clay. Consistence is generally soft, but it is hard in places because of tillage. Reaction ranges from neutral to moderately alkaline. The horizon is weakly calcareous to moderately calcareous in places.

The C horizon is grayish brown, light brownish gray, pale brown, brown, or light gray. Texture is stratified sand, fine sand, very fine sandy loam, and loamy fine sand. The C2 and IIC3 horizons are commonly moderately calcareous to strongly calcareous.

Me—Metz loamy sand. This is a nearly level soil on flood plains, commonly adjacent to the Salinas and San Antonio Rivers. This soil has a profile similar to the one described as representative of the series, but the surface layer is loamy sand. Slopes are mostly about 1 percent.

Included with this soil in mapping were areas of Metz fine sandy loam.

Runoff is slow, and the erosion hazard is slight. If unprotected, this soil is subject to soil blowing.

This soil is used for some irrigated row crops and pasture. A few areas are used for dryland grain. Capability unit IIIs-4(14); range site not assigned.

Mf—Metz fine sandy loam. This is a nearly level soil on flood plains. It has the profile described as representative of the series.

Included with this soil in mapping were small areas of Tujunga, Pacheco, Mochó, and Pico soils, other Metz soils, and Psamments and Fluvents, occasionally flooded.

Runoff is slow, and the erosion hazard is slight. If unprotected, the soil is subject to soil blowing.

This Metz soil is used mainly for irrigated row crops. Capability unit IIs-4(14); range site not assigned.

Mg—Metz complex. This complex consists of undulating to gently rolling soils mainly along drainageways and on modified sand dunes. These soils were so intermingled that it was not feasible to map them separately at the scale used. They have profiles similar to the one described as representative of the series, but the texture of the surface layer is variable. Textures include sand, loamy sand, silt loam, and fine sandy loam that is gravelly or cobbly in places. Currently, this complex is rarely flooded, but before dams and other protection were provided, it was flooded every 2 or 3 years. Slopes are 2 to 9 percent.

Runoff is slow, and the erosion hazard is slight. If unprotected, these soils are subject to soil blowing.

This complex is used mostly for range. A few areas are used for dryland grain. Capability unit IVe-4(14); range site not assigned.

Millsholm Series

The Millsholm series consists of well drained soils that formed on uplands in material weathered from shale or sandstone. Slopes are 30 to 75 percent. The vegetation consists mainly of annual grasses. Scattered oaks and digger pine are in some areas. The elevation is 700 to 3,400 feet. The mean annual air temperature is 58° to 60° F, and the annual precipitation is 15 to 45 inches. The frost-free season is 200 to 300 days. Summers are hot and dry, and winters are cool and moist.

In a representative profile the surface layer is pale brown, slightly acid and neutral loam 17 inches thick. It is underlain by fractured shale.

Permeability is moderate to moderately slow, and the available water capacity is 2 to 4 inches. Roots penetrate to a depth of 10 to 20 inches.

Millsholm soils are used mostly for range. Some areas are used for watershed and wildlife habitat.

Representative profile of Millsholm loam, 30 to 75 percent slopes, approximately 12.2 miles south of Jamesburg along Tassajera Road, 0.2 mile SE along Horse Pasture Trail, and about 55 feet north of trail, in SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 29, T. 19 S., R. 4 E.

A1—0 to 6 inches; pale brown (10YR 6/3) loam, brown (10YR 4/3) when moist; moderate medium and fine granular and moderate medium subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; common very fine roots; many very fine interstitial pores; 10 percent gravel; slightly acid; clear wavy boundary.

B2—6 to 17 inches; pale brown (10YR 6/3) gravelly loam,

oak, madrone, and laurel. These species commonly are scrubs. There are a few scattered Coulter pine, knob-cone pine, and digger pine.

The Plaskett soil has low productivity for Coulter pine (site index averages about 50). The seedling mortality and windthrow hazard are moderate. The equipment limitation is severe. Reliz soils are not used for woodland. Capability unit VIIe-1(15); Plaskett soil not assigned a range site, Reliz soil in Shallow Loamy range site.

Psamments and Fluvents

Pr—Psamments and Fluvents, occasionally flooded. This mapping unit consists of undulating areas of stratified sandy, gravelly, and cobbly sediments on flood plains. These areas are subject to flooding, scouring, and deposition every 3 to 5 years. Typical areas are along the San Antonio, Nacimiento, Salinas, and Arroyo Seco Rivers and adjacent to perennial and intermittent streams. The elevation ranges from 20 to 2,000 feet. The vegetation is mostly scattered sagebrush, some willow and sycamore trees, and a sparse cover of annual grass and forbs.

Small areas of Aquic Xerofluvents and Metz, Tujung, and Mocho soils were included in mapping.

Drainage is excessive, and permeability is very rapid. Runoff is slow or very slow, and the erosion hazard is moderate. Roots can penetrate to a depth of 60 inches, and the available water capacity is 2 to 3 inches.

This land has very little value for farming. It is used for recreation and for very limited range. Capability unit VIw-1(15); Sandy range site.

Pe—Psamments and Fluvents, frequently flooded. This mapping unit consists of undulating areas of stratified sandy, gravelly, and cobbly sediments on flood plains. These areas are subject to annual flooding, scouring, and deposition. Typical areas are along the San Antonio, Nacimiento, Salinas, and Arroyo Seco Rivers and adjacent to perennial and intermittent streams. The elevation ranges from 20 to 2,000 feet. The vegetation is mostly scattered sagebrush, some willows and sycamores, and a sparse cover of annual grasses and forbs.

Small areas of Aquic Xerofluvents and Metz, Tujung, and Mocho soils were included in mapping.

Drainage is excessive, and permeability is very rapid. Runoff is slow or very slow, and the erosion hazard is moderate. Roots can penetrate to a depth of 60 inches, and the available water capacity is 2 to 3 inches.

This land has very little value for farming. It is used for recreation and for very limited range. Capability unit VIIIw-1(15); Sandy range site.

Reliz Series

The Reliz series consists of excessively drained soils on uplands. These soils formed in material underlain by shale and sandstone. Slopes are 30 to 75 percent. The vegetation consists of annual grasses, forbs, scrub oaks, chamise, and manzanita. The elevation is 500 to 3,400 feet. The mean annual precipitation is 10 to 55 inches, the mean annual air temperature is 58° to 62° F, and the frost-free season is 200 to 250 days.

Summers are hot and dry, and winters are cool and moist.

In a representative profile the surface layer is light gray, slightly acid shaly clay loam 12 inches thick. It is underlain by fractured hard shale.

Permeability is moderate, and the available water capacity is 1 to 2 inches. Roots penetrate to a depth of 10 to 20 inches.

Reliz soils are used for range, watershed, and wild-life habitat.

Representative profile of Reliz shaly clay loam, in an area of Santa Lucia-Reliz association, south of Greenfield, 1 mile up Reliz Canyon Road from Herbert Ranch; in SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 35, T. 19 S., R. 6 E.

A11—0 to 5 inches; light gray (10YR 7/2) shaly clay loam, brown (10YR 4/3) when moist; moderate fine and medium granular structure; slightly hard, friable, sticky and plastic; common very fine and few fine roots; many very fine tubular pores and few fine interstitial pores; 35 percent $\frac{1}{4}$ - to 1-inch shale fragments; slightly acid; clear wavy boundary.

A12—5 to 12 inches; light gray (10YR 7/2) very shaly clay loam, brown (10YR 4/3) when moist; massive; slightly hard, friable, sticky and plastic; common very fine and few fine roots; many very fine tubular pores and few very fine interstitial pores; 20 percent $\frac{1}{4}$ - to 1-inch shale fragments and 30 percent 2- to 6-inch shale fragments; slightly acid; clear wavy boundary.

R—12 to 20 inches; hard, fractured siliceous shale of the Monterey Formation.

The A1 horizon is grayish brown, brownish gray, pale brown, light gray, very pale brown, and light brownish gray and is typically shaly clay loam, but ranges to very shaly clay loam and shaly loam. The content of shale fragments ranges from 25 percent in the upper part of the A1 horizon to 70 percent in the lower part. Reaction is strongly acid to neutral. Depth to hard shale ranges from 10 to 20 inches. Most of the shale is siliceous and occurs in the Monterey Formation. Where the soil has formed over sandstone and nonsiliceous shale, the lower part of the A1 horizon is yellowish brown, light yellowish brown, very pale brown, or brown, and reaction ranges to very strongly acid.

Reliz soils occur only with Plaskett or Santa Lucia soils.

Rincon Series

The Rincon series consists of well drained soils that formed in alluvium derived from sandstone and shale on alluvial fans and terraces. Slopes are 0 to 30 percent. The vegetation consists of annual grasses and forbs. The elevation is mostly 100 to 2,000 feet. Except in the Priest Valley area, the mean annual precipitation is 12 to 20 inches, the mean annual air temperature is 57° to 59° F, and the frost-free season is about 250 days. In the Priest Valley area, the elevation is about 2,500 feet, the annual precipitation is 20 inches, and the frost-free season is about 150 days.

In a representative profile the surface layer is dark grayish brown, slightly acid clay loam about 14 inches thick. The subsoil is dark grayish brown, brown, and light yellowish brown, neutral to moderately alkaline clay and heavy clay loam 35 inches thick. The substratum is pale yellow, moderately alkaline, calcareous clay loam that extends to a depth of more than 60 inches.

Permeability is slow.

Rincon soils are used mostly for irrigated field and

w crops. Some areas are used for dryland grain and sture.

Representative profile of Rincon clay loam, 0 to 2 percent slopes, about 2 miles north of San Lucas; out 1.2 miles north on Freeman Flat Road from State Highway 198; 500 feet west into field along fence on Freeman Flat Road; in sec. 29, T. 20 S., R. 9 E.

- Ap—0 to 7 inches; dark grayish brown (10YR 4/2) clay loam, very dark gray and very dark grayish brown (10YR 3/1 and 3/2) when moist; massive; hard, friable, sticky and plastic; common very fine roots; common very fine tubular pores; slightly acid; clear smooth boundary.
- A12—7 to 14 inches; dark grayish brown (10YR 4/2) clay loam; very dark grayish brown (10YR 3/2) when moist; massive; hard, friable, sticky and plastic; common very fine roots; common very fine tubular pores; slightly acid; gradual smooth boundary.
- B1t—14 to 19 inches; dark grayish brown (10YR 4/2) heavy clay loam, very dark grayish brown (10YR 3/2) when moist; massive; hard, firm, sticky and plastic; few very fine roots; common very fine tubular pores; few thin clay films bridging mineral grains; neutral; gradual smooth boundary.
- B21t—19 to 31 inches; brown (10YR 5/3) clay, dark brown (10YR 4/3) when moist; weak coarse prismatic structure; very hard, firm, very sticky and very plastic; few very fine roots; common very fine tubular pores; common thin clay films on faces of peds and lining pores; mildly alkaline; clear wavy boundary.
- B22t—31 to 40 inches; light yellowish brown (10YR 6/4) clay, yellowish brown (10YR 5/4) when moist; moderate coarse prismatic structure; very hard, very firm, very sticky and very plastic; no roots observed; common very fine tubular pores; many moderately thick clay films on faces of peds and lining pores; mildly alkaline; clear wavy boundary.
- B3t—40 to 49 inches; light yellowish brown (10YR 6/4) heavy clay loam, yellowish brown (10YR 5/4) when moist; weak medium subangular blocky structure; hard, friable, sticky and plastic; common very fine tubular pores; few thin clay films on faces of peds and lining pores; very slightly effervescent; lime segregated in a few soft masses; moderately alkaline; clear wavy boundary.
- Cca—49 to 60 inches; pale yellow (2.5Y 7/4) clay loam, light olive brown (2.5Y 5/4) when moist; massive; hard, friable, sticky and plastic; few very fine tubular pores; strongly effervescent, lime segregated in seams and soft masses; moderately alkaline.

The A horizon is dark gray, gray, dark grayish brown, or grayish brown. Texture typically is clay loam, but ranges to heavy loam, silty clay loam, sandy clay loam, or light clay. Reaction typically is slightly acid, but ranges from strongly acid to mildly alkaline. The wide range in reaction results from cultivation. The Ap horizon or upper part of the A horizon typically has hard or very hard clods if cultivated.

The Bt horizon ranges from dark gray and dark grayish brown in the upper part to brown, light yellowish brown, yellowish brown, or pale brown in the lower part. Texture is clay or heavy clay loam. The Bt horizon ranges from neutral to moderately alkaline and is calcareous in the lower part. The boundary between the A horizon and B2t horizon is clear or gradual, or there is a transitional A3 horizon, B1 horizon, or B1t horizon. There is generally a B3 horizon, B3t horizon, or B3tca horizon.

The C horizon is pale yellow, very pale brown, light gray, light grayish brown, light yellowish brown, or yellowish brown. Texture ranges from clay loam to loam and is stratified in places. In some areas the C horizon is fine sand, loamy sand, or weathered sandstone. These materials are at a depth of more than 40 inches.

RaA—Rincon clay loam, 0 to 2 percent slopes. This

is a nearly level soil on alluvial fans and terraces. It has the profile described as representative of the series. The surface layer is clay loam, heavy loam, or light clay.

Included with this soil in mapping were small areas of Croyley, Docas, Antioch, Salinas, Garey, Greenfield, Sorrento, and Lockwood soils and some areas of Rincon soils that have slopes of 2 to 5 percent. Included in Freeman Flat north of San Lucas were areas of soils that have a surface layer of fine sandy loam and a subsoil of clay. Some fine sandy loam material was deposited as a result of runoff from adjacent Garey and Oceano soils.

Runoff is slow, and the erosion hazard is minimal. Roots can penetrate to a depth of more than 60 inches. The available water capacity is 9 to 11 inches.

This soil is used mostly for irrigated field and row crops. A few areas are used for dryland grain. Capability unit IIs-3(14); range site not assigned.

RaC—Rincon clay loam, 2 to 9 percent slopes. This is a gently sloping and moderately sloping soil on alluvial fans and terraces. The surface layer is typically clay loam, but ranges to silty clay loam or sandy clay loam. Slopes are mostly 3 to 5 percent.

Included with this soil in mapping were areas of Rincon clay loam, 0 to 2 percent slopes.

Runoff is slow, and the erosion hazard is slight. Roots can penetrate to a depth of more than 60 inches. The available water capacity is 9 to 11 inches.

This soil is used mostly for irrigated field and row crops. Some areas are used for dryland grain. Capability unit IIe-3(14); range site not assigned.

RaD—Rincon clay loam, 9 to 15 percent slopes. This is a rolling soil on terraces. The surface layer is typically clay loam but ranges to sandy clay loam or loam. Slopes are mostly 10 percent.

Included with this soil in mapping were small areas of Snelling, Alo, Diablo, Shedd, Los Osos, Chamise, Linne, and Nacimiento soils. Also included were areas of soil on terrace crests that are severely eroded and where the subsoil or calcareous substratum is exposed; some soils on tops of dissected terraces that have slopes of 2 to 9 percent; and a few areas on side slopes where slopes are 15 to 25 percent.

Runoff is medium, and the erosion hazard is moderate. The available water capacity is 9 to 11 inches. Roots can penetrate to a depth of more than 60 inches.

This soil is used mostly for dryland grain. Capability unit IIIe-3(14); range site not assigned.

RaE—Rincon clay loam, 15 to 30 percent slopes. This is a hilly soil on dissected terraces. The surface layer is typically clay loam but ranges to silty clay loam, sandy clay loam, or loam. In some places the substratum is fine sand or loamy fine sand below a depth of 40 inches and is cemented or is weathered sandstone. Slopes are mostly 20 to 25 percent.

Included with this soil in mapping were small areas of Snelling, Alo, Los Osos, and Chamise soils. Areas of severely eroded soils on terrace crests where the subsoil or substratum is exposed make up about 10 percent of this mapping unit.

Runoff is rapid, and the erosion hazard is moderate. Roots can penetrate to a depth of 40 to 60 inches. The available water capacity is 6 to 11 inches.

brown (10YR 4/3) when moist; moderate medium subangular blocky structure; slightly hard, friable, slightly sticky and slightly plastic; common very fine roots; many very fine interstitial pores and few very fine tubular pores; 15 percent gravel; neutral; abrupt wavy boundary.

IIR—17 to 20 inches; fractured shale; some soil material and very fine roots in fractures.

The A1 horizon is generally pale brown, but in places is grayish brown, light brownish gray, brown, yellowish brown, or light yellowish brown. Texture is loam, clay loam, or silty clay loam, and reaction ranges from medium acid to neutral. Gravel content ranges from 0 to 20 percent throughout the profile. Depth to hard sandstone or shale ranges from 10 to 20 inches. Stones on the surface and rock outcrops occur in up to 3 percent of the acreage.

MhC—Millsholm loam, 30 to 75 percent slopes. This is a steep and very steep soil on mountains. It has the profile described as representative of the series.

Included with this soil in mapping, and each making up about 10 percent of the acreage, were a loam or clay loam that has more clay in the subsoil than in the surface layer; a soil that has a grayish brown and dark grayish brown surface layer; and a soil that is more than 20 inches or less than 10 inches deep to bedrock. Also included were small areas of Gazos, Gaviota, Los Osos, Reliz, and Dibble soils, areas of Rock outcrop-Xerorthents association, and soils that have a strongly acid or very strongly acid subsoil. In the area south of Burma Road on the Hunter Liggett Military Reservation, Gilroy soils on ridgetops make up 10 to 15 percent of this mapping unit.

Runoff is very rapid, and the erosion hazard is very high.

This soil is used mostly for range, watershed, and wildlife habitat. Capability unit VIIe-1(15); Shallow Loamy range site.

Mk—Millsholm-Alo association. This association consists of very steep soils on hills mainly in the eastern part of Monterey County. Slopes are 50 to 75 percent.

Millsholm soils make up about 40 percent of this association and Alo soils 20 percent, except in Priest Valley, where the association is about 40 percent Alo soils and 30 percent Millsholm soils. Millsholm soils typically have slopes of 60 to 75 percent and are in convex areas that have a southern exposure. Alo soils typically have slopes of 50 to 60 percent and are in areas that have a northern exposure. Los Osos soils on small plateaus that have a northern exposure and San Benito soils in areas that also have a northern exposure each make up about 10 percent of this association. Diablo, Nacimiento, Gaviota, and Shedd soils and rock outcrop make up about 20 percent.

Runoff is very rapid. The erosion hazard is high or very high, especially on Millsholm soils.

The soils in this association are used for range, watershed, and wildlife habitat. Capability unit VIIe-1(15); Millsholm soil in Shallow Loamy range site, Alo soil in Clayey range site.

Mm—Millsholm-Gazos complex. The soils in this complex are steep and very steep. They are on southern and western exposures of mountainsides and are so intermingled that it was not feasible to map them separately at the scale used. These soils formed in material that was derived from sandstone, shale, or schist. Slopes are 30 to 75 percent.

Millsholm soils make up about 50 percent of this

complex and Gazos soils 20 percent. Millsholm soils typically have slopes of 50 to 60 percent, and Gazos soils have slopes mostly of 50 percent. The rest of this complex consists of small areas of Lopez, Reliz, and Los Osos soils that have slopes of less than 30 percent; areas of a soil that is similar to Millsholm soils, but is less than 10 inches deep to bedrock; areas of similar soils that have a mean annual temperature of less than 59° F; and areas of Rock outcrop. Deeply gullied areas and some Gilroy soils are part of this mapping unit south of Plaskett Road.

On the Millsholm soil, runoff is very rapid, and the erosion hazard is very high. On the Gazos soil, runoff is rapid, and the erosion hazard is moderate or high.

These soils are used for range, watershed, and wildlife habitat. Capability unit VIIe-1(15); Millsholm soil in Shallow Loamy range site, Gazos soil in Fine Loamy range site.

Mocho Series

The Mocho series consists of well drained soils that formed in alluvium that was derived mostly from sedimentary rocks. Slopes are 0 to 9 percent. The vegetation consists of annual grasses, forbs, and a few scattered white oaks. The elevation is 50 to 500 feet. The mean annual precipitation is 10 to 16 inches, the mean annual air temperature is about 58° F, and the frost-free season is 200 to 250 days. Summers are warm and dry, except in the northern Salinas Valley where they are foggy, and winters are cool and moist.

In a representative profile the surface layer is grayish brown, calcareous silty clay loam about 12 inches thick. The underlying material is light brownish gray, calcareous silty clay loam and silt loam extending to a depth of 68 inches or more.

Roots penetrate to a depth of more than 60 inches.

Mocho soils are used mostly for irrigated row crops in the Salinas Valley. Other areas are used for dryland crops, pasture, and range.

Representative profile of Mocho silty clay loam, 0 to 2 percent slopes, NE of King City, about 2.5 miles NE on Bitterwater Road from the Southern Pacific Railroad crossing and 1,700 feet SE on farm road, then 100 feet SW into field.

Ap1—0 to 7 inches; grayish brown (2.5Y 5/2) silty clay loam, very dark grayish brown (2.5Y 3/2) when moist; moderate medium subangular blocky structure; hard, firm, sticky and plastic; many very fine and fine roots; very few very fine tubular pores and common very fine interstitial pores; slightly effervescent with disseminated lime; moderately alkaline; clear smooth boundary.

Ap2—7 to 12 inches; grayish brown (2.5Y 5/2) silty clay loam, very dark grayish brown (2.5Y 3/2) when moist; strong very coarse and medium angular blocky structure; hard, firm, sticky and plastic; many very fine and fine and common medium roots; common very fine and fine and few medium tubular pores; slightly effervescent with disseminated lime; moderately alkaline; abrupt wavy boundary.

C1ca—12 to 21 inches; light brownish gray (2.5Y 6/2) silty clay loam, light olive brown (2.5Y 5/4) when moist; mixed with grayish brown (2.5Y 5/2) silt; weak coarse angular blocky structure; slightly hard, friable, sticky and plastic; many very fine and fine and few medium roots; many very fine and fine and common medium tubular pores; strongly effervescent with lime in soft filaments; moderately alkaline; abrupt smooth boundary.

- C2—21 to 24 inches; light brownish gray (2.5Y 6/2) silt loam, dark grayish brown (2.5Y 4/2) when moist; massive; slightly hard, friable, slightly sticky and slightly plastic; many very fine roots; many very fine and common medium tubular pores; slightly effervescent with disseminated lime; moderately alkaline; abrupt smooth boundary.
- C3—24 to 45 inches; light brownish gray (2.5Y 6/2) light silty clay loam, dark grayish brown (2.5Y 4/2) when moist; massive; slightly hard, friable, sticky and plastic; many very fine roots; many very fine and fine and few medium tubular pores; slightly effervescent with disseminated lime; moderately alkaline; clear smooth boundary.
- C4—45 to 68 inches; light brownish gray (2.5Y 6/2) heavy silt loam, dark grayish brown (2.5Y 4/2) when moist; massive; slightly hard, friable, slightly sticky and slightly plastic; many very fine roots; many very fine and common fine tubular pores; slightly effervescent with disseminated lime; moderately alkaline.

The A horizon is grayish brown or dark grayish brown, and texture is very fine sandy loam, loam, silt loam, clay loam, or silty clay loam. Reaction is mildly alkaline or moderately alkaline. The A horizon is slightly to strongly effervescent and has disseminated lime.

The C horizon is grayish brown, light brownish gray, or light gray and is stratified with fine sandy loam, loam, silt loam, and silty clay loam. This horizon is slightly to strongly effervescent and has lime in fine filaments. The concentration of secondary lime is at a depth of 12 to 30 inches.

MnA—Mocho silt loam, 0 to 2 percent slopes. This soil is on flood plains. It has a profile similar to the one described as representative of the series, but the surface layer is silt loam.

Included with this soil in mapping were areas of Docas and Sorrento soils in the San Lucas-San Ardo areas and in Peachtree Valley. Included along the Salinas River were areas of Salinas, Pico, Metz, and Pacheco soils and Mocho silty clay loam, 0 to 2 percent slopes. Small areas of Mocho loam and fine sandy loam were also included.

Permeability is moderate, and the available water capacity is 10 to 12 inches. Runoff is slow, and the erosion hazard is slight.

This soil is used intensively for vegetable and field crops. Capability units I(14), IIIc-1(15); range site not assigned.

MoA—Mocho silty clay loam, 0 to 2 percent slopes. This is a nearly level soil on flood plains. It has the profile described as representative of the series.

Included with this soil in mapping were areas of Cropley soils making up about 10 percent of the acreage. Also included were small areas of Metz, Pico, and Salinas soils and Mocho silt loam, 0 to 2 percent slopes, along the Salinas River. Docas and Sorrento soils were included near the town of San Ardo and in Peachtree Valley.

Permeability is moderately slow, and the available water capacity is 11 to 13 inches. Runoff is slow, and the erosion hazard is minimal.

This soil is used intensively for vegetable and field crops in the Salinas Valley. In Peachtree Valley it is used for dryland grain and some range. Capability units I(14), IIIc-1(15); range site not assigned.

MoC—Mocho silty clay loam, 2 to 9 percent slopes. This is a gently sloping to moderately sloping soil on alluvial fans. It has a profile similar to the one described as representative of the series, but the thick-

ness of the surface layer commonly ranges from 12 to 20 inches.

Included with this soil in mapping were areas of Docas, Sorrento, Rincon, Salinas, and Cropley soils.

Permeability is moderately slow, and the available water capacity is 11 to 13 inches. Runoff is medium, and the erosion hazard is slight.

This soil is used for irrigated row crops and pasture. In Peachtree Valley, it is used for pasture and dryland grain. Capability unit IIe-1(14); range site not assigned.

Montara Series

The Montara series consists of well drained soils on uplands. These soils formed in material underlain by serpentine. Slopes are 15 to 75 percent. The vegetation is mainly annual grasses, forbs, and some brush. The elevation is 500 to 3,000 feet. The mean annual precipitation is 10 to 25 inches, the mean annual air temperature ranges from 57° to 62° F, and the frost-free season is 300 days on the coast and 150 to 175 days elsewhere. Summers are hot and dry, and winters are cool and moist.

In a representative profile the soil is dark grayish brown and dark brown, mildly alkaline clay loam. It is underlain by greenish gray serpentine at a depth of 10 inches.

Permeability is moderately slow, and the available water capacity is 2 to 4 inches. Roots penetrate to a depth of 10 to 20 inches.

Montara soils are used for range, watershed, and wildlife habitat.

Representative profile of Montara clay loam, in an area of Montara-Rock outcrop complex, about 1 mile NE from the intersection of State Highways 41 and 46, then 4 miles NNW of road from State Highway 41 and ½ mile north of county line to Stone Corral Canyon, west up hill about 1,000 feet in SW½NW¼ sec. 31 (projected), T. 24 S., R. 16 E.

A11—0 to 4 inches; dark grayish brown (10YR 4/2) clay loam, very dark grayish brown (2.5Y 3/2) when moist; moderate medium and coarse subangular blocky structure; hard, friable, slightly sticky and slightly plastic; many very fine and common fine roots; common very fine tubular pores; mildly alkaline; clear wavy boundary.

A12—4 to 10 inches; dark brown (10YR 4/3) clay loam, dark brown (10YR 3/3) when moist; weak medium angular and subangular blocky structure; hard, friable, sticky and plastic; common very fine roots; common very fine tubular pores; mildly alkaline; clear irregular boundary.

R—10 to 15 inches, greenish gray (5B 5/1) serpentine; dark yellowish brown (10YR 4/4) and brownish yellow (10YR 6/6) coatings on fractures.

The A1 horizon is very dark grayish brown, dark grayish brown, or dark brown, and texture is light clay loam, clay loam, or heavy loam. Reaction ranges from neutral to moderately alkaline, and the soil is calcareous in places. About 5 to 15 percent of the surface is covered by cobblestones or stones. Depth to bedrock commonly is 10 to 15 inches, but ranges to 20 inches.

Mp—Montara-Rock outcrop complex. This mapping unit is on hills and mountains. The Montara soil has slopes of 15 to 75 percent, but slopes are mostly about 45 percent. The Rock outcrop commonly is serpentine or metamorphic rocks covering an area of a few hun-

are used for dryland grain. Capability unit IVE-1(15); Clayey range site.

LcE—Linne-Shedd silty clay loams, 15 to 30 percent slopes. The soils in this complex are hilly. They formed in material that was derived from calcareous shale and sandstone. These soils were so intermingled that it was not feasible to map them separately at the scale used.

Linne soils make up about 40 percent of the complex and Shedd soils 30 percent. The rest is small areas of Diablo, Nacimiento, Ayar, and San Benito soils; areas where slopes are less than 15 percent; and some clay loams that are similar, but that are less than 24 inches or more than 40 inches deep to bedrock.

The Linne soil has an available water capacity of 4 to 8 inches, and roots can penetrate to a depth of 24 to 40 inches. The Shedd soil has an available water capacity of 4 to 7.5 inches, and roots can penetrate to a depth of 24 to 36 inches. Runoff is rapid, and the erosion hazard is moderate to high.

This complex is used mostly for range. Small areas are used for dryland grain. Capability unit IVE-1(15); Clayey range site.

LcF—Linne-Shedd silty clay loams, 30 to 50 percent slopes. The steep soils in this complex are on uplands. They formed in material that was derived from calcareous sandstone and shale. These soils were so intermingled that it was not feasible to map them separately at the scale used, although exposure is typically to the north on Linne soils and to the south on Shedd soils.

Linne soils make up about 40 percent of the complex and Shedd soils 25 percent. Diablo soils make up 15 percent. The rest of the complex consists of small areas of Nacimiento, San Benito, and Los Osos soils; some soils that are similar, but are less than 24 inches or more than 40 inches deep to bedrock; and areas of landslips.

Linne silty clay loam is 24 to 40 inches deep to bedrock, and the available water capacity is 4 to 8 inches. Shedd silty clay loam is 24 to 36 inches deep to bedrock, and the available water capacity is 4 to 7.5 inches.

Runoff is rapid, and the erosion hazard is high.

This complex is used for range. Capability unit VIe-1(15); Clayey range site.

LcF2—Linne-Shedd silty clay loams, 15 to 50 percent slopes, eroded. These are hilly and steep soils on uplands. They formed in material that was derived from calcareous sandstone and shale. Small rills and a few gullies are commonly at the heads of the major drainageways. Soil material has been deposited at the mouth of most drainageways. These soils were so intermingled that it was not feasible to map them separately at the scale used, although exposure is typically to the north on Linne soils and to the south on Shedd soils.

Linne and Shedd soils each make up about 35 percent of this complex. The rest consists of small areas of Diablo, Nacimiento, San Benito, and Los Osos soils; some severely eroded areas; areas that have exposed bedrock on ridges; some areas of clay loams that are less than 20 inches deep to bedrock; some small areas of landslips; and some areas that have slopes of more than 50 percent.

Linne silty clay loam has an available water capacity of 3.5 to 8 inches, and roots can penetrate to a depth of 20 to 40 inches. Shedd silty clay loam is 20 to

30 inches deep, and the available water capacity is 3 to 6 inches. Runoff is medium to rapid, and the erosion hazard is high. The erosion occurs mostly on Shedd soils, but some sheet erosion occurs on Linne soils.

This complex is used for range, wildlife habitat, and watershed. Capability unit VIe-1(15); Clayey range site.

LcG2—Linne-Shedd silty clay loams, 50 to 75 percent slopes, eroded. The soils in this complex are very steep and on uplands. They formed in material that was derived from calcareous sandstone and shale. These soils are so intermingled that it was not feasible to map them separately at the scale used, although exposure is typically to the north on Linne soils and to the south on Shedd soils.

Linne soils make up about 40 percent of the complex and Shedd soils 25 percent. Diablo soils make up about 15 percent of the complex and occur throughout the unit. The rest is small areas of Nacimiento, San Benito, and Los Osos soils; some soils that are very similar, but that are less than 20 inches or more than 40 inches deep to bedrock; and some small areas of landslips.

The Linne soil has an available water capacity of 4 to 8 inches and roots can penetrate to a depth of 20 to 40 inches. The Shedd soil has an available water capacity of 4 to 6 inches, and roots can penetrate to a depth of 20 to 30 inches. Runoff is very rapid, and the erosion hazard is very high. Shedd soils are more erodible than Linne soils.

This complex is used for range, watershed, and wildlife habitat. Capability unit VIIe-1(15); Clayey range site.

Lockwood Series

The Lockwood series consists of well drained soils that formed in alluvium that was derived from siliceous shale. These soils are on alluvial fans and inland and coastal terraces (fig. 5). Slopes are 0 to 15 percent. The vegetation is mainly annual grasses and a few thick stands of buckwheat and chamise and a few scattered oaks. The elevation is 70 to 1,200 feet. The mean annual precipitation is 12 to 35 inches, the mean annual air temperature is 57° to 60° F, and the frost-free season is 150 to 350 days. Summers are hot and dry inland; winters are generally cool and moist, but they are warm and foggy along the coast.

In a representative profile the surface layer is gray, very strongly acid to neutral shaly loam about 26 inches thick. The subsoil is gray, neutral shaly heavy loam and brown, mildly alkaline shaly clay loam that extends to a depth of 82 inches. The substratum is pale brown, mildly alkaline loam to a depth of 86 inches or more.

Permeability is moderately slow. Roots penetrate to a depth of more than 60 inches.

Lockwood soils are used mostly for irrigated field and row crops. Some areas are used for apricots, walnuts, and alfalfa and for dryland grain, irrigated pasture, and annual range as well as for recreation and wildlife habitat.

Representative profile of Lockwood shaly loam, 0 to 2 percent slopes, about 7 miles NW of King City on Central Avenue, 100 feet SW and 50 feet NW from the



Figure 5.—Wave-cut coastal terraces at Pacific Valley. Fluvents, stony, are in the foreground and along the road. The rest of the terrace area is mainly Lockwood shaly loam, 2 to 9 percent slopes.

corner of Teague and Central Avenues; about 30 feet from edge of road.

Ap1—0 to 3 inches; gray (10YR 5/1) shaly loam, very dark grayish brown (10YR 3/2) when moist; moderate fine and medium subangular blocky structure; slightly hard, very friable, slightly sticky and slightly plastic; few very fine roots; many very fine interstitial pores; 15 percent gravel-sized shale fragments; very strongly acid; low surface pH due to fertilizers or pesticides, low pH temporary; abrupt smooth boundary.

Ap2—3 to 16 inches; gray (10YR 5/1) shaly loam, very dark brown (10YR 2/2) when moist; weak very coarse angular blocky structure that parts to moderate medium granular; slightly hard, friable, slightly sticky and slightly plastic; few very fine and common fine roots; common very fine interstitial pores and very few fine tubular pores; 10 percent shale fragments; soil compacted by tillage; slightly acid; gradual smooth boundary.

A13—16 to 26 inches; gray (10YR 5/1) shaly loam, very dark brown (10YR 2/2) when moist; strong medium granular structure; slightly hard, very friable, slightly sticky and slightly plastic; few very fine roots; many very fine interstitial pores and common fine and medium tubular pores; 10 percent shale fragments; neutral; gradual smooth boundary.

B1—26 to 40 inches; gray (10YR 5/1) shaly heavy loam,

very dark grayish brown (10YR 3/2) when moist; moderate medium granular structure; soft, very friable, slightly sticky and slightly plastic; few fine and medium roots; many very fine interstitial pores and common fine tubular pores; 25 percent shale fragments; neutral; clear irregular boundary.

B21t—40 to 57 inches; brown (10YR 5/3) shaly clay loam, dark yellowish brown (10YR 4/4) when moist; massive; slightly hard, very friable, sticky and plastic; many very fine interstitial pores; ½-inch thick dark brown horizontal clay band; continuous thin clay films, few moderately thick clay films bridging mineral grains; 30 percent shale fragments; mildly alkaline; gradual wavy boundary.

B22t—57 to 82 inches; brown (10YR 5/3) shaly clay loam, dark brown (10YR 4/3) when moist; massive; slightly hard, very friable, sticky and plastic; many very fine interstitial pores; continuous thin and few moderately thick clay films bridging grains; 30 percent shale fragments; mildly alkaline; clear smooth boundary.

IIC—82 to 86 inches; pale brown (10YR 6/3) heavy loam, dark brown (10YR 4/3) when moist; massive; slightly hard, very friable, slightly sticky and slightly plastic; few thin clay films in pores; mildly alkaline.

The A horizon commonly is gray, very dark grayish brown, dark grayish brown, dark gray, or grayish brown. Texture is loam or clay loam. Shale fragments 2 to 40 milli-

Elder Series

The Elder series consists of well drained soils on alluvial fans and in small valleys. These soils formed in alluvium derived from granitic and sedimentary rocks. Slopes are 0 to 9 percent. The vegetation consists of annual grasses, forbs, and scattered oaks. The elevation is 50 to 1,400 feet. The mean annual precipitation is 12 to 30 inches, the mean annual air temperature is 57° to 60° F, and the frost-free season ranges from 150 days in the interior valleys to 250 days in the Salinas Valley. Summers are mainly warm and dry, though they are often foggy in the Salinas Valley and hot and dry in the interior mountain valleys; winters are cool and moist.

In a representative profile the surface layer is grayish brown, slightly acid and dark brown, neutral sandy loam about 37 inches thick. The underlying material is yellowish brown, mildly alkaline and moderately alkaline stratified fine gravelly sandy loam and fine gravelly loamy coarse sand that extends to a depth of 73 inches or more.

Elder soils are used for irrigated row crops, vineyards, orchards, annual pasture, and dryland grain and hay. They are also the site of military operations.

Representative profile of Elder sandy loam, 0 to 2 percent slopes, about 3 miles north of Chualar; 0.58 mile NW on Old Stage Road from Esperanza Road, 275 feet NE on farm road, and 24 feet NW into field.

Ap—0 to 9 inches; grayish brown (10YR 5/2) sandy loam, very dark grayish brown (10YR 3/2) when moist; weak thick platy structure and moderate medium subangular blocky structure; slightly hard, very friable, nonsticky and nonplastic; common very fine and fine and few medium roots; common very fine tubular pores; 10 percent fine angular gravel and 15 percent very coarse sand; slightly acid; clear smooth boundary.

A12—9 to 22 inches; grayish brown (10YR 5/2) sandy loam, very dark grayish brown (10YR 3/2) when moist; weak coarse angular blocky structure; slightly hard, friable, nonsticky and nonplastic; many very fine, common fine, and few medium roots; many very fine interstitial pores and few medium tubular pores; 10 percent fine angular gravel and 15 percent very coarse sand; slightly acid; clear smooth boundary.

A13—22 to 37 inches; dark brown (10YR 4/3) sandy loam, dark brown (10YR 3/3) when moist; massive; slightly hard, friable, nonsticky and nonplastic; many very fine and few medium roots; many very fine interstitial pores and many very fine and few medium tubular pores; 10 percent fine angular gravel and 15 percent very coarse sand; neutral; diffuse smooth boundary.

IIC1—37 to 52 inches; yellowish brown (10YR 5/4) fine gravelly sandy loam, dark brown (10YR 4/3) when moist; massive; slightly hard, friable, nonsticky and nonplastic; many very fine and few medium roots; common very fine interstitial and tubular pores; 20 percent fine angular gravel and 10 percent very coarse sand; mildly alkaline; diffuse smooth boundary.

IIC2—52 to 73 inches; yellowish brown (10YR 5/4) stratified fine gravelly loamy coarse sand, dark yellowish brown (10YR 4/4) when moist; massive; slightly hard, very friable, nonsticky and nonplastic; common very fine roots; many very fine interstitial and tubular pores; 20 percent fine angular gravel; moderately alkaline.

The A horizon is very dark gray, dark gray, dark grayish brown, grayish brown, or brown. Texture is loam, sandy loam, fine sandy loam, very fine sandy loam, or coarse sandy

loam and, in some places, gravelly. Reaction ranges from medium acid to mildly alkaline. The A horizon is 20 to 40 inches thick.

The C horizon is brown, yellowish brown, pale brown, gray, or light yellowish brown. Texture ranges from sandy loam to loamy coarse sand that is 5 to 30 percent pebbles. Gravel content commonly increases in the lower part of the C horizon, and the horizon is stratified gravel and cobbles below a depth of 40 to 60 inches. Reaction ranges from neutral to moderately alkaline, and alkalinity commonly increases with depth. The horizon is noncalcareous. In some areas, sandstone or shale is at a depth of 40 to 72 inches.

EaA—Elder sandy loam, 0 to 2 percent slopes. This is a nearly level soil on alluvial fans and plains. It has the profile described as representative of the series.

Included with this soil in mapping, and each making up about 10 percent of the acreage, were Arroyo Seco and Gorgonio soils. Also included were areas of Hanford, Danville, Chualar, Salinas, and Tujunga soils, some small areas of soils that have gravel and cobbles at a depth of 24 to 60 inches, and areas where the surface layer is massive and hard or is light brownish gray.

Permeability is moderate, and the available water capacity is 6 to 9 inches. Roots can penetrate to a depth of more than 60 inches. Runoff is slow, and the erosion hazard is slight.

The soil is used mostly for irrigated field and row crops. In some places it is used for orchards or vineyards. Capability unit IIs-4(14); range site not assigned.

EbC—Elder very fine sandy loam, 2 to 9 percent slopes. This is a gently sloping and moderately sloping, slightly hummocky soil that occupies small areas in narrow valleys. It formed on alluvial fans, terraces, and flood plains. It has a profile similar to the one described as representative of the series, but sandstone or shale is at a depth of 40 to 72 inches. Slopes are mostly about 3 percent.

Included with this soil in mapping were areas of Elder sandy loam, 0 to 2 percent slopes, and Arroyo Seco, Lockwood, Santa Lucia, and San Andreas soils. Also included, and each making up about 15 percent of the acreage, were areas of soils that have a surface layer less than 20 inches thick and areas of soils that have slopes of less than 2 percent.

Permeability is moderate. Runoff is slow, and the erosion hazard is moderate. Roots can penetrate to a depth of 40 to 60 inches, and the available water capacity is about 6 to 11 inches.

This soil is used mainly for annual pasture, and much of it is on the Hunter Liggett Military Reservation. Small areas are used for annual hay-grain crops. Capability units IIe-1(14), IIIe-1(15); range site not assigned.

EcA—Elder loam, gravelly substratum, 0 to 2 percent slopes. This soil is on alluvial fans or plains. It has a profile similar to the one described as representative of the series, but the surface layer is loam, fine sandy loam, or very fine sandy loam and commonly lacks gravel. The gravel content ranges from 0 to 5 percent, and depth to gravel or cobbles is 40 to 50 inches. Slopes are mostly 1 percent or less.

Included with this soil in mapping, and each making up about 10 percent of the acreage, were Arroyo Seco soils and Elder sandy loam, 0 to 2 percent slopes. Also

included were areas of Chualar, Hanford, Danville, and Lockwood soils, areas where depth to the gravel or cobblestone substratum ranges from 24 to 40 inches, and areas that have a surface layer of light brownish gray, massive, hard clay loam.

Permeability is moderate above the very rapidly permeable underlying material, and the available water capacity is 5.5 to 8 inches. Roots can penetrate to a depth of 40 to 50 inches. Runoff is slow, and the erosion hazard is slight.

This soil is used for irrigated field and row crops, orchards, and some vineyards. Capability unit IIs-4 (14); range site not assigned.

Elkhorn Series

The Elkhorn series consists of well drained soils on marine terraces and dunelike hills. These soils formed in material underlain by weakly consolidated sandy sediments or ferruginous sandstone. Slopes are 2 to 30 percent. The vegetation consists of annual grasses, forbs, brushy plants, and a few scattered oaks. The elevation is 50 to 500 feet. The mean annual precipitation is 12 to 20 inches, the mean annual air temperature is about 57° F, and the frost-free season is about 270 days. Summers are warm and foggy, and winters are cool and moist.

In a representative profile the surface layer is brown, neutral to medium acid fine sandy loam 26 inches thick. The subsoil is brown, medium acid sandy clay loam 20 inches thick. The substratum is strong brown, slightly acid fine sandy loam that extends to a depth of more than 63 inches.

Permeability is moderately slow, and the available water capacity is 7.5 to 9 inches. Roots penetrate to a depth of more than 60 inches.

Elkhorn soils are used mostly for specialty crops such as brussels sprouts, strawberries, artichokes, and broccoli. Some are used for annual pasture, hay, or range.

Representative profile of Elkhorn fine sandy loam, 9 to 15 percent slopes, about 4 miles north of Moss Landing; 2,600 feet west, 3,000 feet north of Springfield Road from the intersection with State Highway 1. The site is about 20 feet east of the road.

Ap1—0 to 9 inches; brown (10YR 5/3) fine sandy loam, dark brown (10YR 3/3) when moist; moderate medium and coarse subangular blocky structure; hard, friable, slightly sticky and slightly plastic; many very fine and few medium roots; few very fine tubular pores; neutral; clear smooth boundary.

Ap2—9 to 17 inches; brown (10YR 5/3) fine sandy loam, dark brown (10YR 3/3) when moist; weak and moderate coarse angular blocky structure; hard, firm, slightly sticky and slightly plastic; common very fine and few medium roots; few very fine and fine tubular pores and few very fine interstitial pores; slightly acid; clear smooth boundary.

A3—17 to 26 inches; brown (10YR 5/3) heavy fine sandy loam, dark brown (10YR 3/3) when moist; weak and moderate medium and coarse angular blocky structure; hard, friable, slightly sticky and slightly plastic; common very fine and fine and few medium roots; many medium, fine, and very fine tubular pores and many very fine interstitial pores; many worm casts; medium acid; clear irregular boundary.

B2t—26 to 46 inches; brown (7.5YR 5/4) sandy clay loam,

mixed dark brown and reddish brown (7.5YR 4/4, 5YR 4/4) when moist; weak coarse angular blocky structure; very hard, firm, sticky and slightly plastic; few very fine and very few fine roots; few fine tubular pores and common very fine interstitial pores; few thin discontinuous clay films on faces of peds and lining pores; many distinct medium and coarse weakly cemented concretions; medium acid; gradual wavy boundary.

C—46 to 63 inches; strong brown (7.5YR 5/6) fine sandy loam, mixed strong brown and dark brown (7.5YR 5/6 and 4/4) when moist; massive; very hard, firm, slightly sticky and slightly plastic; few very fine and very few fine roots; few coarse tubular pores and common very fine interstitial pores; few thin distinct clay films lining pores; few medium faint weakly cemented concretions; slightly acid.

The A horizon is dark grayish brown, grayish brown, gray, or brown. Texture is sandy loam, fine sandy loam, or heavy fine sandy loam. Structure is blocky or granular. The lower part of the A horizon, below the Ap horizon, commonly is slightly more acid than the Ap or B2t horizons. In some places, fine to coarse (1 to 5 millimeters) concretions occur in the lower part of the A horizon, the B2t horizon, and the C horizon. An A3 horizon or B1 horizon 6 to 12 inches thick is common.

The B2t horizon ranges from dark brown to light yellowish brown, and texture is sandy clay loam or heavy sandy loam. Reaction ranges from medium acid to neutral. When dry, the soil material is hard to extremely hard.

The C horizon ranges from brown to reddish yellow, and texture ranges from loamy sand to light sandy clay loam. Reaction is medium acid to neutral.

EdB—Elkhorn fine sandy loam, 2 to 5 percent slopes.

This is a gently sloping soil on dunelike marine terraces and on benches that have smooth, undulating slopes. It has a profile similar to the one described as representative of the series, but the surface layer is typically gray or grayish brown.

Included with this soil in mapping were areas of Santa Ynez, Oceano, and Cropley soils and the Elkhorn variant. Also included were areas that have slopes somewhat steeper than 5 percent, some areas where a dense, compact clay layer underlies the subsoil below a depth of 45 inches, and some small depressions or basins that are ponded several times a year.

Runoff is slow, and the erosion hazard is slight.

This soil is used mostly for such specialty crops as artichokes, brussels sprouts, broccoli, and strawberries. Capability unit Iie-1 (14); range site not assigned.

EdC—Elkhorn fine sandy loam, 5 to 9 percent slopes.

This is a moderately sloping soil on marine terraces and benches. It has a profile similar to the one described as representative of the series, but the surface layer commonly is grayish brown and is 20 to 35 inches thick. The surface layer is more than 35 inches thick on foot slopes.

Included with this soil in mapping were areas of Elkhorn fine sandy loam, 9 to 15 percent slopes. Also included were small areas that are underlain by clay below a depth of about 45 inches.

Runoff is slow to medium, and the erosion hazard is slight to moderate.

This soil is used mostly for such specialty crops as artichokes, broccoli, brussels sprouts, and strawberries. Capability unit Iie-1 (14); range site not assigned.

EdD—Elkhorn fine sandy loam, 9 to 15 percent slopes. This is a strongly sloping soil on marine terraces and benches. It has the profile described as representative of the series.

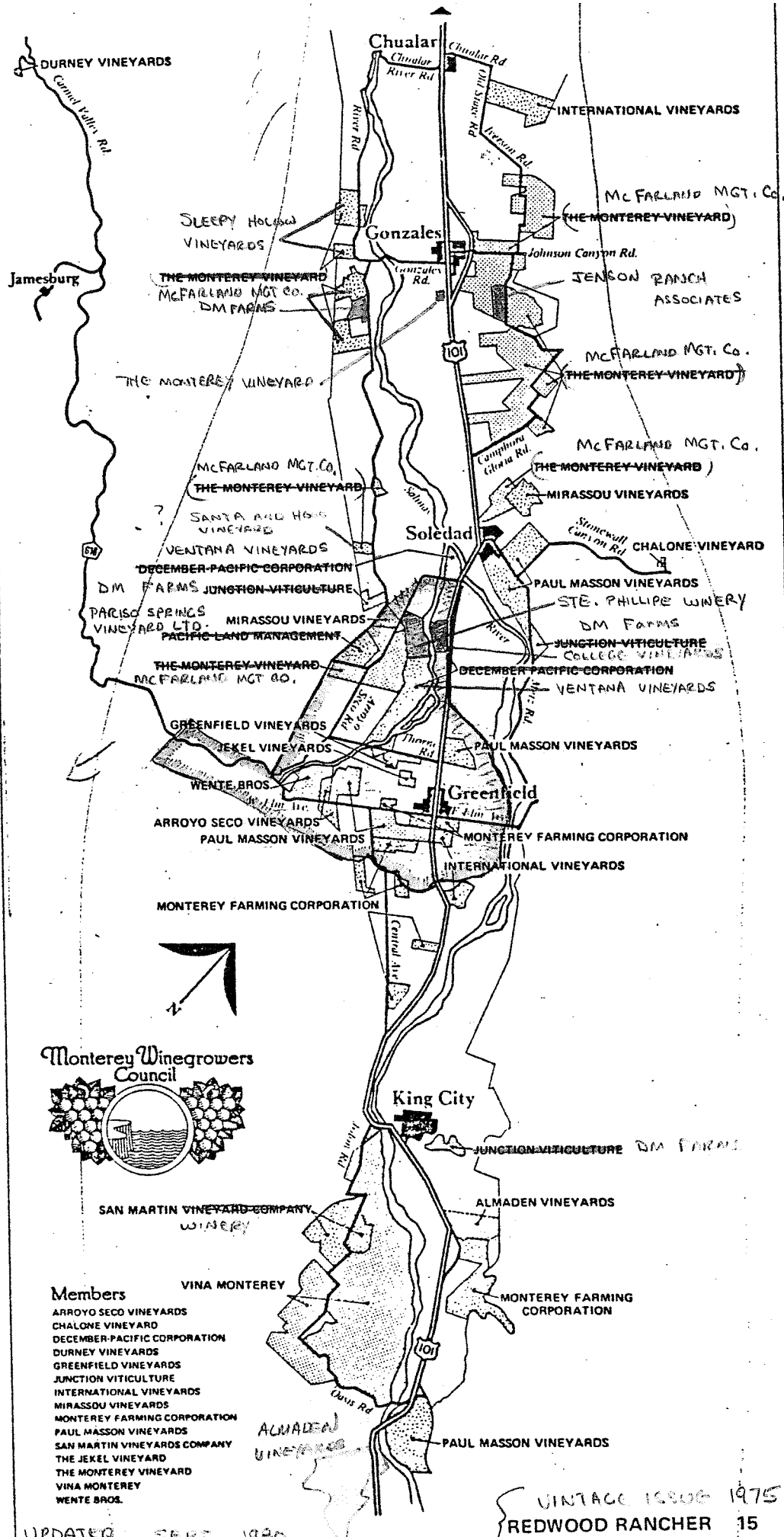


tation on each of The Monard sites constantly records so that an accurate reading of climate is always available.

eration was begun in 1972 by Jerry Lohr and Peter Durney. The organization recently developed a new winery in San Jose and is preparing choice varietal wines from the Monterey County vineyard. It will be on the market soon with its own brand. The winery, which will produce 25,000 cases annually, has 60 acres of vineyards, one of the smallest in the county. William Durney is the owner of the ranch; the first crop was harvested in 1972. The vineyard is an excellent job with the offerings, a Gamay Beaujolais Blanc, with Cabernet in the vineyard is part of the 1,200-acre del Sueno.

International Vineyards, with 900 acres in Chualar, is the most northerly of the county's vineyards. International Vineyards has 300 acres in Greenfield. The vineyard is unique in several ways related to Gold Seal Vineyards in Hammondsport, New York, and 1,000 acres represents the largest vineyard of an eastern winery. Durney is vice president in charge of operations and Earl Fiscalini is the manager. International Vineyards has 200 plus acres of Cabernet, Chardonnay and Gewurztraminer. 100 plus acre parcels of Gamay Beaujolais.

The vineyards, close to Greenfield, are the smallest in the county at present and is a partnership between the Angeles brothers, William, and Gus, a filmmaker. The vineyard was planted in 1972. The brothers own the vineyards almost every year and have a resident manager, Ramon Ramirez. Jelke Vineyards has Cabernet and Johannisberg



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March 5, 1982

Mr. Charles Bacon
RESEARCH & REGULATIONS
DEPARTMENT OF THE TREASURY
Bureau of Alcohol, Tobacco & Firearms
Washington, D.C. 20226

Dear Mr. Bacon:

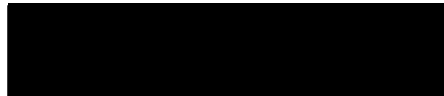
I am writing to you in response to your questions regarding the petition for an Arroyo Seco Appellation. With respect to the length of the growing season in the designated area, it approximates seven months. The degree days range from 1800 to 2000 as recorded at the Wente Bros. vineyards which lay at the mouth of the Arroyo Seco canyon.

If you need written responses to the questions which I was able to answer over the phone, please do not hesitate to contact me.

Thank you for considering and reviewing the proposed area.

Sincerely,

WENTE BROS.



Carylyn Wente

CW:lb