Marin County Livestock & Agricultural Crop Report 2005

MARIN COUNTY DEPARTMENT OF AGRICULTURE • WEIGHTS AND MEASURES



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July 2006

A. G. Kawamura, Secretary California Department of Food and Agriculture

And

Marin County Board of Supervisors Susan L. Adams, President, District 1

Harold C. Brown Jr. District 2 Charles McGlashan, District 3 Steve Kinsey, Cynthia Murray, District 4 District 5

In accordance with the provisions of Section 2279 of the California Food and Agricultural Code, I am pleased to submit the Annual Crop and Livestock Report for 2005. This report is a summary of counts, acreage, yields, and gross value of agricultural production in Marin County. The 2005 gross value of all production was \$52,822,536. This represents a decrease of \$2,074,926 or 3.8% from the 2004 total agricultural production value. The report represents gross returns to the producer and does not indicate actual net profit.

Milk is the long standing, premier commodity for Marin (there are 31 dairies in Marin, which includes 1 goat milk dairy), and this year accounts for 60% of the crop report's total value. Market milk prices dropped in 2005 representing a decrease in overall milk value by \$1,955,632 (5.9%).

Livestock value decreased by \$494,410 or 4.4%. Prices received for sheep, beef and dairy cattle increased from last year's market values, however, there was a decrease in the number of sheep, beef, and dairy cattle. The value of wool decreased by \$6,177 or 18.4%.

Aquaculture experienced a value increase of \$411,012 (14.4%) due mostly to higher survival and planting rates leading to increased harvests.

The value of field, fruit and vegetable production, excluding wine grapes, went down by \$55,778, a 0.8% decrease in value. The total value of wine grapes decreased slightly by \$442 or 0.17%, which is a good showing considering a poor set due to cool, wet spring weather at time of bloom. Nursery crops experienced an increased value of \$26,501 or 4%.

My appreciation goes to the many growers, individuals and organizations for their cooperation in providing the information necessary for this report and special thanks to the members of my staff, Laurel Thomassin, Amanda Stephens, and Jeff Stiles.

Respectfully submitted,

Hay Carlson

Stacy K. Carlsen Agricultural Commissioner

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Cover photo: Star Route Farms, Bolinas (L – R: Prince Charles, Warren Weber, Camilla, Duchess of Cornwall, Amy Weber) Photo credits: Holly Stewart

> This report is available at our web site: <u>www.co.marin.ca.us/depts/ag/main/index.cfm</u>

Organic and Sustainable Farming Bring the Prince of Wales to Marin County



arin County is still aglow from the visit of the Prince of Wales and the Duchess of Cornwall in November, 2005. The Royal couple came to explore Marin County's organic farming and sustainable agricultural practices. Prince Charles and Camilla were not disappointed. They shopped at the Point Reyes Farmer's Market, toured several organic farms in west Marin, had lunch at Warren Weber's Star Route Farms, and even had a beer at the Old Western Saloon in Point Reyes Station. Don Murch of Gospel Flat Farm

said that when Charles and Camilla paused at his Pt. Reyes Farmer's Market stall, he was so excited he completely forgot the bow he'd been practicing for several days. The visit of the Prince of Wales and the Duchess of Cornwall to the County of Marin is indeed an outstanding honor.

The term *sustainability* evokes numerous definitions that attempt to describe an exacting set of criteria and procedures for success. But the term is elusive, perhaps because the components of sustainability are unique to each grower, farm, and community. There is no one-size-fits-all. The challenge is to understand the values and objectives of the many individuals attempting to reform modern agricultural practices. Changing the current paradigm of high input, resource consumption, and environmental degradation will require developing shifts in attitudes, farming practices, and government policies.

To become entwined in our everyday life, sustainable agriculture must be fostered by the farmers' commitment to the land, supported by local markets, and buoyed by public policy that encourages back-to-the-future philosophies and practices. Success relies on continuous and direct interaction between growers, land, community, local government, and the market.

The critical challenge to society and the agricultural community will be to recognize the need for and benefits of developing, implementing, and supporting policies that work for sustainable agriculture. The support of government must include incentives that encourage sustainable agriculture, as well as opportunities for farmers to achieve success.

Marin County offers an organic certification program which is accredited by the USDA and verifies compliance with the National Organic Program standards. In 2005, Marin had 38 registered organic producers farming 11,300 acres, producing food products with a total gross value of \$4,210,122.

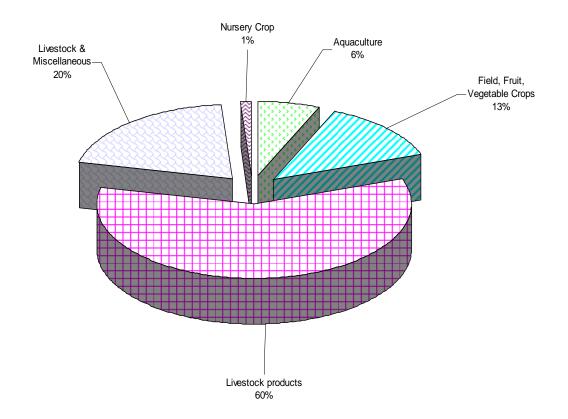
Other notable efforts include: zoning regulations that demonstrate a commitment to protecting our agricultural lands; a streamlined permitting process for agricultural operations; the hiring of an Agricultural Ombudsman to advocate on behalf of producers; and the development of general land use plans that make specific policy recommendations on sustainability.

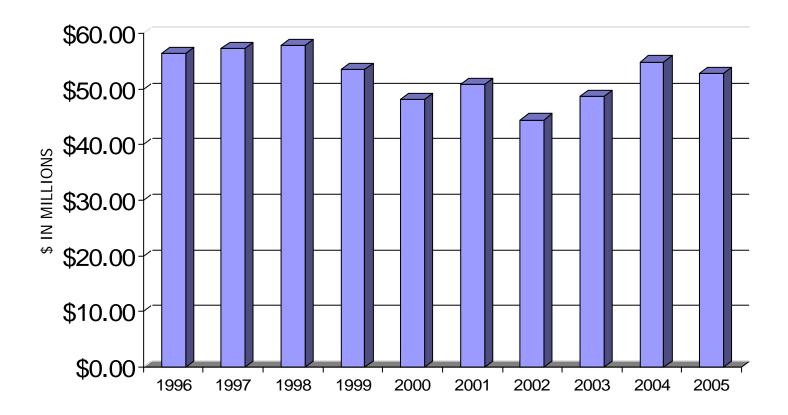
Perhaps the most important component is the surrounding community – a community that not only supports agriculture in concept, but is actively supportive of family farms in its shopping practices as well as its politics.

Summary of Production

Livestock Products	<u>2005</u> \$ 31,282,329	<u>2004</u> \$ 33,244,138
Livestock	\$ 10,631,673	\$ 11,126,083
Field, Fruit & Vegetable Crops	\$ 6,954,533	\$ 7,010,753
Aquaculture	\$ 3,264,910	\$ 2,853,898
Nursery Crops	\$ 689,091	\$ 662,590
TOTAL	\$ 52,822,536	\$ 54,897,462

2005 Production Summary





Agricultural Production Gross Value A Ten Pear Summary

Livestock and Aquaculture

		No. of	Live		[Dollar Value	
Item	Year	Head	Weight	Unit	\$/Unit	Total	
Cattle &	2005	15,577	91,869	cwt	\$ 84.20	\$ 7,735,679	
Calves	2004	16,481	98,032	cwt	\$ 81.66	\$ 8,005,291	
				_			
Sheep &	2005	10,320	11,146	cwt	\$ 85.06	\$ 948,023	
Lambs	2004	10,643	11,494	cwt	\$ 76.93	\$ 884,238	
	0005	400.075				¢ 4 0 4 7 0 7 4	
Miscellaneous	5 2005	128,375				\$ 1,947,971	
Poultry*	2004	85,000				\$ 2,236,554	
rounty	2001	00,000				Ψ 2,200,001	
Aquaculture	2005	Oys	sters, Mussels	s, & Clams		\$ 3,264,910	
-	2004	Oys	ters, Mussels,	& Clams		\$ 2,853,898	
Total	2005					\$ 13,896,583	
	2004					\$ 13,979,981	

Miscellaneous includes poultry fryers, chicken eggs for consumption, hogs, and rabbits – New Category

* Figures for 2005 are listed under Miscellaneous

Livestock Products

				De	ollar Value
Item	Year	Production	Unit	\$/Unit	Total
Milk	2005	2,124,848	cwt	\$14.69	\$ 31,215,000
(Market)	2004	2,162,971	cwt	\$15.35	\$ 33,201,604
Milk	2005	2,581	cwt	\$15.51	\$ 40,031
(Manufacturi	ing) 2004	596	cwt	\$15.20	\$ 9,059
Wool	2005	60,662	lbs	\$ 0.45	\$ 27,298
	2004	61,992	lbs	\$ 0.54	\$ 33,475
Total	2005				\$ 31,282,329
	2004				\$ 33,244,138

Inventories of Livestock and Poultry

(Number of Head as of January 1, 2006)

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ITEM		HEAD	NUMBER
All Cattle			33,470*
	Milk cows and heifers 2 years and over	10,200	
	Beef cows and heifers 2 years and over	9,000	
Sheep and Lambs, all			7,583
Miscellaneous**	Poultry (fryers, laying hens), hogs, a	and rabbits	128,375

* Includes cows, heifers, calves, and bulls ** New Category



Field, Fruit and Vegetable Crops

		Harvested	Ton/	Total			lar Value	
Item	Year	Acreage	Acre	Tons	Unit	\$/Unit	Total	
Hay, Gras		1,950	1.8	3,510	ton	\$ 57.50	\$ 201,825	
	2004	1,950	1.75	3,413	ton	\$ 55.00	\$ 187,715	
Hay, Oat	2005	1,525	2.5	3,813	ton	\$ 75.00	\$ 285,975	
	2004	1,525	2.1	3,203	ton	\$ 77.00	\$ 246,631	
Silage	2005	2,000	9.9	19,800	ton	\$ 24.00	\$ 475,200	
	2004	2,000	12.0	24,000	ton	\$ 24.00	\$ 576,000	
Hay, Grair	ר 2005	40	1.0	40	ton	\$ 160.00	\$ 6,400	
	2004	40	1.0	40	ton	\$ 160.00	\$ 6,400	
Pasture,	2005	810				\$ 100.00	\$ 81,000	
Irrigated	2004	810				\$ 100.00	\$ 81,000	
Pasture,	2005	154,000				\$ 29.00	\$ 4,466,000	
Other	2004	154,000				\$ 29.00	\$ 4,466,000	
Fruits &	2005	204					\$ 1,172,507	
Vegetable	s2004	210.1					\$ 1,180,939	
Grapes,	2005	108		111.78	ton		\$ 265,626	
Wine*	2004	110		138.75	ton		\$ 266,068	
Total	2005						\$ 6,954,533	
	2004						\$ 7,010,753	

* Varieties include: Cabernet Franc, Cabernet Sauvignon, Chardonnay, Gewurztraminer, Merlot, Pinot Noir and, Shiraz



Aursery Products

Item	Year	Production Acres	Dollar Value Total	
Nursery	2005	40	\$ 689,091	
Stock, All	2004	37	\$ 662,590	



Marin County Department of Agriculture/Weights & Measures

Departmental Mission Statement

Our mission is to serve the public's interest by ensuring equity in the market place, promoting and protecting agriculture, protecting environmental quality and the health and welfare of Marin County's residents.

Following is a description of the department's activities:

Pest Prevention

Pest prevention encompasses several activities aimed to prevent the introduction and spread of exotic pests in Marin County. Pest exclusion focuses on preventing the entry and establishment of exotic pests and limiting the intrastate movement of newly discovered pests. Marin County inspectors monitor all avenues of pest entry into the county. Pest detection is the systematic search for exotic pests outside of a known infested area. The goal is to find infestations of harmful exotic pests and eradicate them before it becomes biologically or economically unfeasible.

Protection of the Environment

Over the years Marin County has developed a program of Pesticide Use Enforcement that includes all the facets that are needed to comply with Federal and State laws and to ensure proper, safe, and efficient use of pest control methods and pesticides for the production of food and fiber and for the protection of public health, safety and welfare, and the environment. This is accomplished by a permit process and monitoring the use of pesticides, investigating pesticide incidents and complaints, continuous enforcement of pesticide use and records associated with that use, collecting and reviewing of pesticide use data, and educating and assisting users of pesticides.

Integrated Pest Management

Integrated pest management (IPM) is a common-sense approach to pest management that uses a variety of methods to control pests. Pesticides may be part of an IPM program, however, effort is focused towards preventing pest problems by controlling conditions which may attract and support pests. Marin County's IPM program is designed to ensure that County departments and everyone applying pesticides to property owned and/or managed by the County of Marin utilize IPM practices, eliminate or reduce pesticide applications where ever possible and take reasonable measures to ensure that long-term prevention or suppression of pest problems has minimal negative impact on human health, non-target organisms, and the environment. The goal of the County IPM Ordinance was to reduce countywide total yearly pesticide use by 75% by weight, as compared to the total pesticide use in 1997. The county has exceeded that goal with current estimates showing a greater than 80% pesticide use reduction.

Product Quality

Marin County inspectors are protecting consumers by inspecting agricultural products for compliance with laws, regulations, and standards and ensuring that businesses are afforded a fair and equitable opportunity to market their products. Inspections are conducted at horticultural nurseries, farmers markets, and organic farms, as well as locations selling wholesale and retail eggs.

Weights and Measures

The Weights and Measures program protects the interests of the consumer and market place to ensure honesty and integrity of routine transactions when products are sold by weight, measure, count or time. This is accomplished through continuous and systematic inspection of all equipment that is used to weigh or measure a commodity. Weights and Measures inspectors test taximeters, scales in stores, gasoline pumps, fabric and cordage meters, electric meters, water meters, livestock and animal scales, vehicle scales, scanner systems for pricing accuracy, and packaged products for stated net contents. Every transaction involving the exchange of goods by volume, count, or weight is affected in a very vital way by some form of weights and measures.



Summary of the Sustainable Agricultural Activities

Sustainability is a method of balancing resource use in such a manner that it provides for current needs while ensuring such resources will be available to meet the needs of future generations.

Organic Food Production, Registration, and Certification

Organic production systems strive to achieve agro-ecosystems that are ecologically, socially, and economically sustainable. Organic farming emphasizes a greater cooperation with nature without reliance on synthetic inputs.

All California organic producers register in their principal county of operation. There are 38 registered organic producers in Marin County, farming 11,300 acres which includes 10,986 acres in pasture, producing a total gross value of \$4,210,122. There are 6 registered processors.

Organic commodities produced in Marin County include: apples, artichokes, beans, berries, broccoli, cabbage, carrots, chard, cucumbers, cut flowers, dairy products, eggs, figs, garlic, grapes, herbs, lavender, leaf lettuce, lemons, livestock, milk, mixed salad greens, olives, onions, pasture, peaches, pears, plums, potatoes, pumpkins, radishes, rhubarb, silage, spinach, squash, strawberries, sunflowers, tomatoes, turnips, vegetable starts, and watercress.

Marin Organic Certified Agriculture (MOCA)

The Marin County Agricultural Commissioner's Office is accredited by the USDA as an official organic certification agency. MOCA serves the local community who are promoting sustainable farming practices.

Local and statewide consumer demand for certified products is increasing with an expectation by consumers that organic products are verifiable. MOCA was developed to provide a professional service to local individual and business operations engaged in the production and distribution of organically grown commodities. MOCA certification verifies compliance with the USDA National Organic Program standards and documents the operation practices of a sustainable agricultural system. In 2005 MOCA certified 35 growers and 2 processors in Marin and Sonoma Counties.

Biological Control

Biological pest control is the use of natural enemies to help suppress pest populations to economically and environmentally acceptable levels. Once the agent becomes established, control is self perpetuating, potentially reducing the need to use pesticides. The following are pests found in Marin and some of the methods being used to control them.

Pest	<u>Biological Agent/Mechanism</u>
Gorse	Gorse Mite, Seed Weevil
Bull Thistle	Bull Thistle Gall Fly
Yellow Star Thistle	Seed Head Weevil, Gall Fly, Hairy Weevil, Peacock Fly
Scotch Broom	Seed Weevil, Stem Boring Moth
Ash White Fly	Parasitic Wasp
Italian Thistle	Seed Weevil
Purple Star Thistle	Seed Weevil
Klamath Weed	Beetle
Canada Thistle	Mechanical and chemical removal
Plumeless Thistle	Mechanical and chemical removal
Eucalyptus Red Gum Lerp Psyllid	Parasitic Wasp

Grass Fed Livestock & Livestock Protection

We also developed and now manage a sustainable livestock protection program that provides cost sharing for non-lethal methods of predator control. This includes property improvements such as cross fencing; deterrents like electric fencing and management practices such as guard animals.

And lastly, there is the Marin County Agriculture Department Grass Fed Livestock Certification program whose purpose is to provide local grass fed livestock producers with a program which will provide the local livestock industry with the incentive to pursue innovative and sustainable animal agriculture principles, encourage sustainable agricultural and land management practices, increase marketing opportunities, and promote more natural animal management practices.



Marin/Sonoma Weed Management Area

A weed management area group was formed for Marin and Southern Sonoma Counties in early 1999. The Weed Management Area (WMA) unites landowners and public agencies, provides an opportunity to share resources in mapping, planning information, and helps control weeds across land ownership boundaries. The WMA has performed a number of weed control projects made possible by the state legislature passing AB 1168 and SB 1740 which provide funding to WMA's. With this funding, the WMA has removed wooly distaff thistle (*Carthamus lanatus*), and purple star thistle (*Centaurea calcitrapa*). Mapped all Marin County roads for certain invasive weeds determined by the WMA, produced an educational brochure, and developed a 'Don't Plant a Pest' program centered on the nursery industry. The WMA works with all landowners to determine the best method of control of each individual landowner's requirements. Where there are sites potentially harboring endangered or threatened species of plants and animals, hand removal is the method of choice. Mechanical and chemical removal of weeds is utilized at other sites. The WMA conducts hand weed pulling field days. Anyone is welcome to come to the meetings and everyone is welcome to help control weeds.

Pest Exclusion

In 2005, Marin County personnel conducted 6,060 incoming plant quarantine inspections. Plant shipments were monitored at Federal Express, UPS, nurseries, ethnic markets, aquatic supply stores, and post entry quarantine. 53 gypsy moth inspections of household goods from eastern states were conducted, as well as 1,550 Glassy-Winged Sharp Shooter inspections on plant material from infested California counties.

11 rejections of plant material were made. Rejected plant material was either destroyed or reconditioned and released.

A total of 11 pests were intercepted. Of those, 2 were "Q" rated, 3 were "C" or "D" rated, and 4 were viable GWSS egg masses.

The following is a list of the significant pest interceptions:

Scientific Name	Common Name	Rating
Homalodisca coagulate	Glassy-Winged Sharp Shooter	В
Naupactus spp.	Beetle	С
Pheidole sp	An Ant	Q
Pomacea bridgesi	Snail	С
Sphaerobolus spp.	Fungal Spore Mass	С
Technomyrex albipes	An Ant	Q

Q - rating: Quarantine Action

A – rating: State Action

B – rating: County Action

C – rating: County Action at Discretion of the Agricultural Commissioner

D – rating: No action

Pest Detection

1,194 traps were serviced for exotic insect pests (including Mediterranean and Oriental Fruit Flies, Mexican Fruit Fly, Olive Fruit Fly, Gypsy Moth, Japanese Beetle, Melon fly, Vine Mealy Bug, Asian Longhorn Beetle, and Glassy-Winged Sharpshooter). Of the 1,194 traps, 289 traps were placed for the Glassy-Winged sharpshooter in nurseries and vineyards areas throughout the county, 2 Olive Fruit Fly traps were placed in olive orchards, and 6 Vine Mealy Bug traps were placed in vineyards.

Glassy-Winged Sharpshooter

The Glassy-Winged Sharpshooter (GWSS) (*Homalodisca coagulata*) is a serious pest in California. This insect was first observed in California in 1990 and is now found throughout Southern California and portions of the San Joaquin Valley. It is a particular threat to vineyards due to its ability to spread Xylella fastidiosa, the bacterium that causes Pierce's disease. Pierce's disease kills grapevines and there are no effective treatments for it. The Glassy-Winged Sharpshooter also spreads other diseases to a variety of agricultural and ornamental plants, having the potential to substantially impact California's agriculture and environment if left unchecked.

To prevent the introduction of this leafhopper into Marin County, staff inspect all incoming nursery plant shipments from infested California counties. In 2005 a total of 1,803 shipments were inspected for GWSS and 4 viable egg masses were found and treated. Detection traps placed throughout the county are also monitored.



Sudden Oak Death (SOD)

The story of Sudden Oak Death in Marin County began in 1995 with the observation of large numbers of tanoaks dying in Mill Valley. Mortality of coast live oak and black oaks was also noticed, here in Marin and other coastal counties. In 2000 UC researchers identified the cause of SOD as a previously unknown fungal-like pathogen, Phytophthora ramorum. Currently SOD has been confirmed as naturally occurring in 14 northern and central coastal counties.

In 2001 the California Department of Food and Agriculture initiated a state quarantine establishing restrictions against P. ramorum and its hosts to control the spread of SOD. The quarantine was revised in 2003 to allow unrestricted movement of host material within quarantined counties. Federal regulations established by the United States Department of Agriculture are also in place regulating interstate movement of host material.

P. ramorum hosts include many native trees and understory plants associated with oaks and tanoaks in the native woodland, such as bay laurel and huckleberry. It has also been found in nurseries (within and outside of the quarantined counties where it occurs naturally) on ornamental plants such as camellia, rhododendron and viburnum. Thus many cultivated nursery plants have been added to the host list and quarantines. Currently there are 84 known hosts, while new hosts continue to be found.

P. ramorum manifests itself in two ways depending on the host. On oaks and tanoaks it manifests as potentially lethal trunk cankers; on other hosts it causes a foliar or twig blight which is rarely lethal. Foliar hosts, unlike the canker trunk hosts, are not a dead end for the pathogen. Instead these hosts may act as a vector for the disease, allowing build up of inoculum on leaves, which can spread through either natural or artificial means under moist windy conditions. P. ramorum prefers cool, wet climates, and the spores may spread through rainwater and soil, as well as infested plant material.

During 2005, regulatory officials continued to find P. ramorum in nurseries within and outside of the quarantined counties; protocols were implemented to isolate the infested plants. Also this year researchers discovered that the pathogen is capable of infecting roots as well as stem and leaf tissue. 2005 surveys for the disease in Marin showed that it has continued to spread into new areas within the county, including Pt. Reyes National Seashore.

Aerial surveys in California show less mortality and fewer new confirmations of P. ramorum in coast live oak stands, but increases in mortality and confirmations in tanoak stands. Tree mortality occurs in wildland and urban/wildland interface areas, resulting in dramatic changes in the landscape, affecting ecosystems, increasing fire and safety hazards, and decreasing property values.

Marin County's public works department removed 770 roadside trees over the 3 years it was part of the state-funded SOD Hazardous Tree Removal Program. This program assessed dead and dying trees along roadways and trails to determine the presence of P. ramorum, and subsequently removed them to ensure public safety. Various state and county parks and open space areas also removed numerous trees under this program.

The California Oak Mortality Task Force (COMTF) was established in 2000 to research and understand the disease process in an effort to manage the spread of Phytophthora ramorum. More information, including diagnostic guides and management recommendations may be found at <u>www.suddenoakdeath.org</u>.

Farmers Markets of Marin County

The purpose of farmers markets are to allow local producers to sell their certified commodities direct to the public. There are 28 certified producers that have been issued certificates in Marin County. The following 8 Farmers Markets have been certified by the Agricultural Commissioner to market local produce in Marin County.

Civic Center Farmers Markets

Civic Center, San Rafael Thursdays – 8:00 am – 1:00 pm Sundays – 8:00 am – 1:00 pm Open All Year

Old Town Novato Farmers Market

Down Town, Novato Tuesdays – 5:00 pm – 8:00 pm April – October

Sausalito Farmers Market

Sausalito Ferry Landing Fridays – 4:00 pm – 8:00 pm May – October

Pt. Reyes Farmers Market

Toby's Feed Barn 11250 Hwy 1, Pt. Reyes Station Saturdays – 9:00 am – 1:00 pm June - October

Fairfax Farmers Market

Broadway, in Fairfax Theatre Parking Lot Wednesdays – 4:00 pm – 8:00 pm May – September

Downtown San Rafael Farmers Mrk

Fourth St., San Rafael Thursdays – 6:00 pm – 9:00 pm April - September

Corte Madera Farmers Market

Corte Madera Town Center 1554 Redwood HWY Wednesdays – 12:00 pm - 5:00 pm Open All Year

Larkspur Farmers Market

Larkspur Landing Circle Saturdays – 10:00 am - 2:00 pm May - October



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