

Yolo County Historical Collection
226 Buckeye Street
Woodland, CA 95695
(530) 666-8147
iulia.bodeanu@yolocounty.org

Scan for Survey



Dear Educator,

Thank you for checking out the **Yolo County Agriculture Educational Kit**. We are proud to offer educators the tools to engage their students with museum and library resources in the classroom. We hope that these kits spark creatively among teachers and students.

This kit focuses on learning about our local community as an agricultural resource. The items included illustrate the long history of agricultural production and ingenuity in Yolo County and California. The handouts featuring the “top crops” of Yolo County include information about rice, wheat and tomatoes, along with guided questions to spark discussion around where does our food come from? what do we know about our environment and how do we connect with it? what is necessary for plants to grow? Familiarizing students with past and present agricultural practices, while encouraging students to explore with creating their own gardens is the goal of this kit.

These kits were developed with the intention of being adaptable to various grades and reading levels and can be utilized for Kindergarten through 6th grades. We would love your feedback and ask that you complete a survey by visiting <https://forms.gle/zGW998RQ9HKyzhcS8> or scanning the QR code at the top of this page, so we can improve the experience of your students and continue to develop educational kits to meet your needs as a teacher.

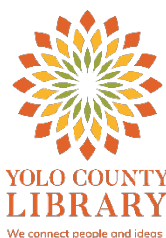
If you would like to schedule a field trip to the Gibson House and Property please contact Jenna Harris, Education Manager at jharris@yoloarts.org or call (530) 309-6464. More information is available at <https://yoloarts.org/fieldtrips/> and <https://yolocountylibrary.org/research/yolo-county-historical-collection/>.

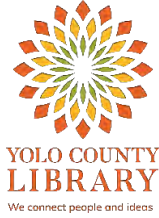
Respectfully,

Iulia Bodeanu

A handwritten signature in black ink, appearing to read 'Iulia Bodeanu', with a long, sweeping horizontal line extending to the right.

Museum Curator
Yolo County Historical Collection





Yolo County Agriculture Recommended Book List

John Deere, That's Who! By Tracy Nelson Maurer

Working Animals, Farming by Claudia Martin

Working on a Farm by Katie Marsico

Earth Cycles, Plant Life Cycles by Sally Morgan

Right This Very Minute, a Table-to-Farm Book about Food and Farming by Lisl H. Detlefsen

Yolo County, Land of Changing Patterns by Joann L. Larkey and Shipley Walters

Table of Contents

Yolo County Agriculture Education Kit

<i>Page 4-12</i>	Historic Photographs of Agriculture & Farm Workers and Discussion Questions
<i>Page 13-21</i>	California Farm Observer and Discussion Questions
<i>Page 22-32</i>	Farm Bureau Monthly and Discussion Questions
<i>Page 33-34</i>	How to Start a Garden Activity
<i>Page 35</i>	1926 Yolo County in Word and Pictures Coloring Sheet
<i>Page 36-38</i>	Yolo County's "Top Crops" Info Sheet (Rice, Wheat, Tomatoes)
<i>Page 39</i>	Art and Agriculture Still Life Art Activity

Historic Photographs of Yolo County Agriculture and Farm Workers

Guiding Questions for Educators

Take some time and look at all of the reproduced photographs in this kit.
After looking at the photographs discuss:

1. Name some of the agricultural crops that you see in the photographs.
2. What do you notice about the farm workers in the photographs; i.e. clothing, gender, jobs that they are doing, ethnicity, etc.?
3. What kind of equipment and technology is being used by the farm workers?

Select two photographs and compare them:

1. What do these photographs have in common?
2. What differences do you see between the photographs?

Look at the photograph of Yolo County's Exhibit at the CA State Fair (1919):

1. What kinds of agricultural products do you see in the photograph?
2. Discuss ideas about why the County would choose to have these items on display at their booth.

More advanced discussion topics:

Do you think farming techniques have changed over time? Why do you think it has, or has not, changed over time? Can you use any of the photographs to illustrate your point?

Have a discussion around the panoramic photograph of the Filipino asparagus cutters. What do the students notice about the workers and the working conditions? This photograph could be used as part of a lesson on the Immigration Act of 1924 and the United Farmworker's Movement.



Domingo Florendo Ricardo, a Filipino farm worker, in asparagus packing shed on J.W. Hollenbeck Ranch, Clarksburg. June, 1926. Photograph. D24-001. Acc. # Unknown.

YOLO COUNTY
ARCHIVES

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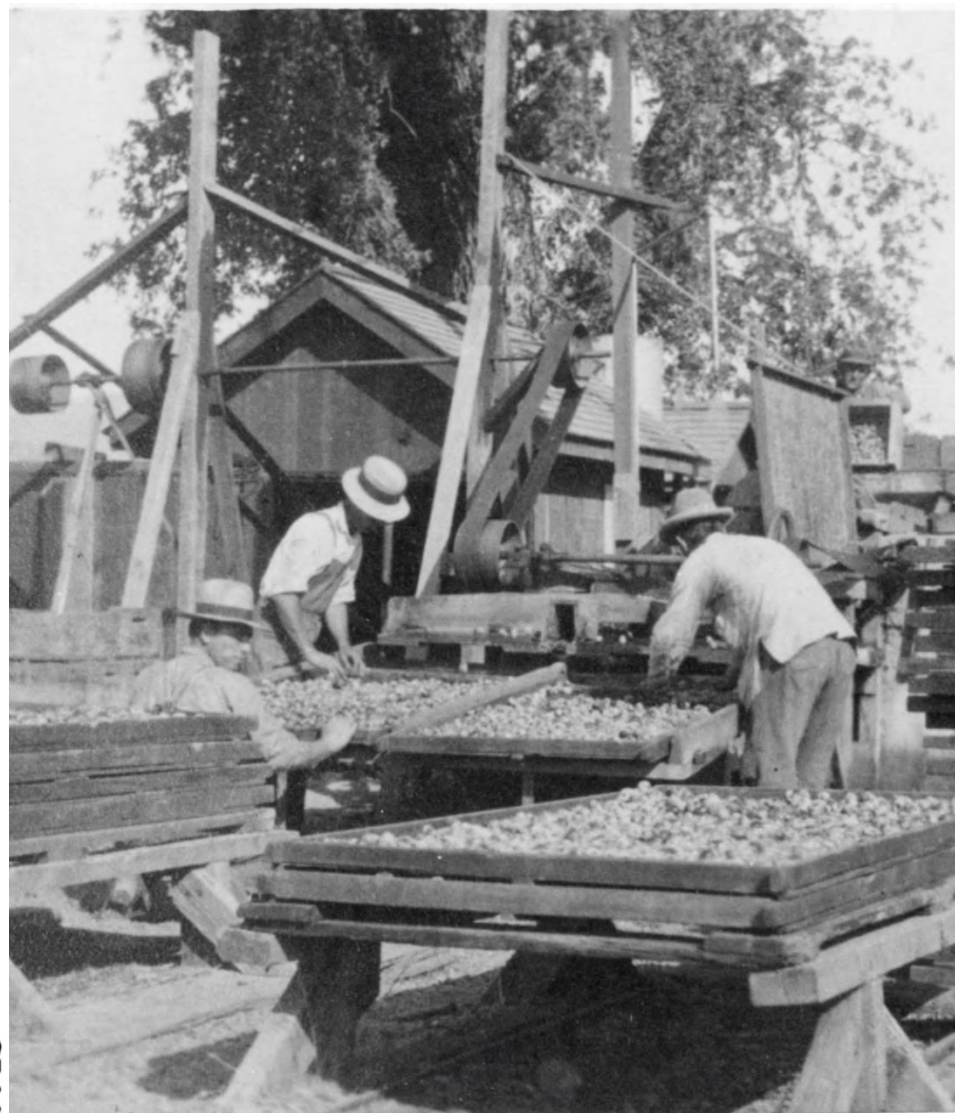
Unidentified child standing next to a basket full of hop cones with hop trellises in the background on Loudal Ranch, Elkhorn District. 1919. Photograph. O01-034. Acc. #2003-01



Andy Danzero and two other men harvesting and drying peaches at Andy Danzero Ranch, Winters.
c. 1950s. Photograph (cropped).
F01-007A. Acc. #1993-17

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Three unknown men operating a walnut hulling machine, Winters.
c. 1930s. Photograph (cropped).
H01-002. Acc. #1993-17



Best harvester and mule team on Robert Button Ranch, Buckeye District, c. 1894. Photograph. F01-003. Acc. #1993-11

Diesel tractor and 6 bottom plow. 1920s. Photograph A01-011. Eddy Collection. Acc. #1986-04



Wheat harvester in a wheat field. c. 1970s. Photograph. E01-010A. Daily Democrat Collection. Acc. #1985-02

Tomato harvester with crew of Hispanic workers in the fields. 1985. Photograph. G01-013C. Acc. #1993-18





Mile Saelee picking strawberries along Highway 16 near the Yolo Fliers Club, Woodland. c. 1990s. Photograph.
L01-007. Daily Democrat Collection. Acc. #1994-16

Group of men and women posed in the LaRue almond packing shed, Davis. c. 1900. Photograph.
A01-177. Eddy Collection. Acc. #1986-04



Women picking hops in a field by the Sacramento River in the Monument Bend District. c. 1900. Photograph.
O01-041. Donation #D03-51

Farm workers picking hops at Boyer Camp. 1917. Photograph
A01-093. River Garden Farms Collection. Acc. #1987-01





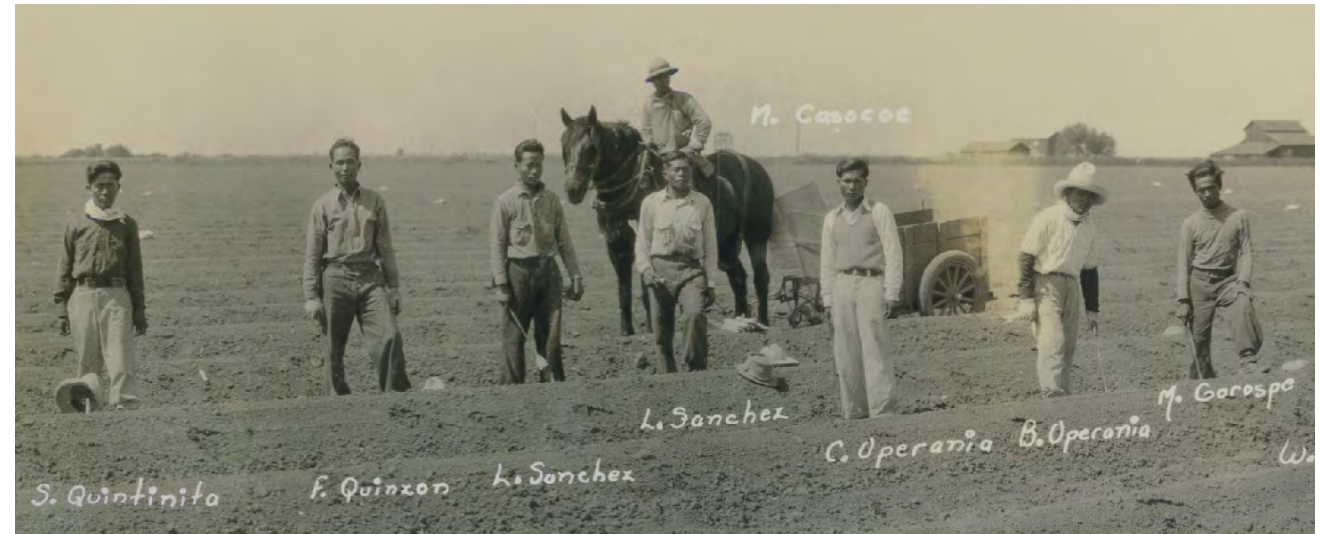
Two unknown men picking peaches. c. 1950s. Photograph.
A01-078. River Garden Farms Collection. Acc. #1987-01



Yolo County Exhibit at the California State Fair.
1919. Photograph.
B07-021. Eddy Collection. Acc. #1986-04



Group of Filipino asparagus cutters standing in a field on the Merwin Farm (Holland Tract) Clarksburg.
1934. Panoramic Photograph.
OSP 19. Acc. #1993-19





Cropped close-up views from
OSP 19. Acc. #1993-19



California Farm Observer

Guiding Questions for Educators

Look through the entire newspaper.

1. What do you notice about the newspaper?
2. What are the articles about?
3. What is being advertised in the newspaper? What isn't being advertised in the newspaper?

Read the article "The Greased Plow" on page 8:

1. What will the new "greased plow" allow farmers to do that they couldn't before?
2. What substance is being used to "grease" the plow? Why can't regular grease for the lubricant?
3. According to the article, how many years have plows and other tools be drug "through the soil?"

Read the front page article "Where Are the People Who Put the 8 Big Tomatoes . . . ?"

1. What was the total cost of tomato production, per acre, according to the Yolo County Farm Advisor in 1976?
2. Name some of the tomatoes varieties that were being viewed at the Merwin fields.
3. Why are the tomatoes rotting in the fields? What does this tell us about the farming and the farming industry?

Have the students break into small groups read small sections of "The Farmers Lot" (by Leland Ruth, Exec. V.P. for the Agricultural Council of CA) on page 4.

1. Have the groups discuss their section of the article:
 - What was your section of the article about?
 - Was there a specific crop, or agricultural product being discussed?
 - Are there words in the article that you do not know? Discuss in your group to try to figure out the meaning.
 - Did your section of the article help you to understand the farming industry better? Why or why not?

More advanced discussion topic:

Read the two articles on page 8 titled "American Report on Life on a Soviet Farm" and "New Soviet order for 1976 U.S. Wheat." Do either of these articles show bias or a specific point-of-view? Why might Russia be the focus of two articles in this newspaper?

California Farm Observer

SAMPLE COPY

VOL. 39, NO. 13

93 W. MAIN

P.O. BOX 1204

Phone 662-1374

WOODLAND, CA. 95695

WEDNESDAY, SEPT. 1, 1976

IN THE ITTY BITTY CAN —

Where Are the People Who Put the 8 Big Tomatoes ...



Seven loads of tomatoes, rotting in the sun. Rejected by the cannery. One by one. These seven consecutive loads of rejects came from the Harlan-Dumars farms. Sandy Harlan estimated that the farm has lost one third of its tomato crop in this way and the harvest has still two to four weeks to run. If it doesn't rain again the remainder of the crop should come through in good shape, says Sandy.

A comprehensive tomato production cost study was completed last spring for Yolo County by Farm Advisor Mel Zobel. Certain assumptions had to be made at that time, of course. A summary was as follows: Cost of seed bed preparation per acre, \$44.21. Planting, \$43.52. Growing costs, \$182.37. Misc. operation and growing costs, \$57.29. Management and taxes, \$80. Harvest costs, \$419.04. Investment costs,

\$287.12. Total, \$1,113.55 per acre, based on 25 tons per acre from 240 acres of machine harvested tomatoes. It was assumed that there was an uninterrupted harvest with no quota situation, a good planting schedule and no labor problems. The cannery was paying \$44.54 per ton.

Despite scenes like the above throughout the tomato country, the tomato growers turned out this

week for a tomato variety field meeting at the S. H. Merwin tomato fields. There were four replications of 19 varieties in the yield portion of the trial. There were 40 different lots in the observation. There were tomato squares, rounds, hybrids, longs and pear shapes. Some were early. Some were later. Of great interest was the UC 82-line, varieties which should receive good publicity. Other lots worth noting were 04

(UC 96-2), 09, 014, 021, 024, 027, 031, 033, 036, 037 and 039. A tentative meeting also was set for the Button ranch at Winters on September 9, on another variety.

The King is dead... long live the King.... in the top producing tomato country in the world.

(Photo by Lyra Halprin)

CONGRATULATIONS TO THE 39th ANNUAL GRAPE FESTIVAL!

More and More Vintners Are Harvesting Their Fruit with THE **CHISHOLM-RYDER** **GRAPE HARVESTER**

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You Saw It in Santa Rosa You Saw It in Tulare!
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Bakersfield and Fresno

CONGRATULATIONS

The 39th annual Grape Festival and National Wine Show will be held at Lodi September 9, 10, 11 and 12 - Thursday, Friday, Saturday and Sunday.

Theme of the Festival this year is: --
FESTIVAL: USA.

The harvest celebration will be climaxed by the Sunday afternoon parade. Queen Mary Langdon, her court of four princesses and five escorts will ride in the parade. The National Wine Queen will ride on the vintners' float.

A total of 108 grape varieties are listed in the premium book this year. Leading the list are the Flame Tokays, a table grape, with 95 per cent of the world supply produced within ten miles of the grape festival grounds.

A grape stomp and grape eating contest are two new events scheduled for the Festival and Wine Show.



The 1976 CHISHOLM-RYDER mechanical grape harvester took the spotlight at the Ninth annual Farm Equipment Show at Tulare and you saw it again at the Fourth Annual Viticulture Industry Show at Santa Rosa. As the leader in the

mechanical grape harvester industry, Chisholm-Ryder has revolutionized the wine and grape juice industries.

Chisholm-Ryder grape harvesters may be obtained from dealerships in Fresno and Bakersfield, at Growers Supply in

Fresno and Kern County Equipment Co. in Bakersfield. Douglas Laundry is the factory representative for California. Harvesters also may be obtained from Process Engineers Inc. in Hayward.

Meanwhile, Chisholm-Ryder joins grape growers and vintners in the Lodi area in welcoming you to the 39th annual Grape Festival and National Wine Show in Lodi, Sept. 9 - 10, 11 and 12.

Douglas Laundry, Factory Representative



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39th ANNUAL
LODI GRAPE FESTIVAL

AND THE NATIONAL WINE SHOW!

Thursday, Friday, Saturday, Sunday, 1976

SEPT. 9, 10, 11, 12

The Record Attendance of 84,245 Was Set in 1969.
What Will This Year's Attendance Be?

WELCOME TO THE WINE COUNTRY!

THIS YEAR'S THEME IS "FESTIVAL U.S.A."

Free Wine Tasting

ANIMATED MANNIKINS . . . MURALS DEPICTING CALIFORNIA'S HISTORY . . . GRAPE MURALS DEALING WITH THE PAST
Congratulations to the 39th Annual Grape Festival

VISIT THE WINE EXHIBIT BUILDING OPEN FROM MID-MORNING
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MARY LANGDON, FESTIVAL QUEEN

JUST WHEN THINGS GET BETTER, THEY GET WORSE

By LELAND H. RUTH
Executive Vice President,
Agricultural Council of
California

GOVERNMENT REGULATIONS

Adaptation has increasingly become a way of life for those involved in California agriculture. From the standpoint of governmental regulations, it seems that just when things begin to work smoothly for a farmer, someone changes the rules.

In recent years, a myriad of boards and commissions have been created to protect and regulate various public interests. Because of the size and diversity of California agriculture, each time a new regulatory board is formed or an existing board changes, our industry is either advertently or inadvertently affected. Such has been the case with Cal-OSHA, air resources board, water resources board, the agricultural labor relations board -- the list is seemingly endless. Farmers are feeling the impact of these boards daily on an increasing scale.

NECESSARY EVIL

Although we in agriculture sometimes lose sight of the fact, the many state boards and com-

missions in existence today were created by the Legislature with a constructive purpose in mind. Many environmental, health, economic and labor problems which threaten the welfare of our state can only be handled by governmental regulation. Unfortunately for agriculture, many times the cure is worse than the bite.

A case in point is the effect the new overtime wage provisions, recently issued by the IWC (Industrial Welfare Commission) have on the cotton ginning industry. Essentially, the new regulations call for employers in industries handling products after harvest (i. e., cotton gins) to pay their employees time and one half after eight hours per day or 40 hours in a week. Additionally, there is a day off provision which will necessitate gins to begin running two ten hour shifts, six days per week. This contrasts with the two 12 hour shifts per day with no time off which has been the practice.

Ginning cotton is an arduous, difficult occupation. It is the task of the IWC to protect the workers' interests and we do not argue the objective of this commission. However, many times the needs of the industry are disregarded in the name of worker rights, to the detriment of all.

*THE SERIOUS crime rate is increasing at a faster pace in rural America and the nation's smaller communities than in the big cities, FBI statistics revealed. There were nearly 11.3 million serious crimes committed last year but police were able to make arrests in only one out of every five cases. Crime has been rising at a slightly faster rate outside major urban areas. Serious crimes (murder, robbery and burglary) rose by 10 per cent in the suburbs last year and 8 per cent in the rural areas. The rate for the nation's 56 cities with more than 250,000 residents was 7 per cent.

*JIMMY Carter, meeting on a farm near Des Moines, with representatives of the National Farmers Organization, Farmers Union, National Grange, American Farm Bureau and National Corn Growers Association, declared, 'Under my administration, if I'm elected, there will never be another embargo that singles out farm products.' The Democratic presidential nominee attached the export embargoes placed on agricultural products by the Nixon and Ford administrations in the last three years, calling them 'a record of unparalleled incompetence.'

Last year's statistics show that it took an average of 600 hours in 50 consecutive days per man to complete the entire ginning process. While the paying of overtime to employees is an accepted practice in most industries, in the cotton ginning industry, the increased overtime requirement as proposed by the IWC could prove to be an excessive burden.

To remain competitive in the world cotton market, the gins will

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During the Middle Ages, baths were usually taken only on a doctor's request!

be forced to minimize overtime payments. This will lengthen the cotton ginning season from 50 to approximately 64 days. The lengthened ginning season will mean the gins and the growers will have to gear up for a field storage program which means increased automation at a cost of an estimated \$32,000,000 to the industry.

While this example refers to cotton gins only, its ramifications impact all facets of agriculture. In many cases, while it appears on the surface the worker will make more money, in reality he will lose to automation.

EMPLOYEES GAIN LITTLE

Agriculture is without question California's number one contributor to the economy. New rules and regulations like those of the IWC have brought about added costs and a discouraging impact on farmers and the businesses that support them. Some farmers will

*PARTLY because of last year's record grain crop, retail food prices this year are expected to increase 2 to 5 per cent, compared with an 8.5 per cent gain in 1975 and increases of 14.5 per cent in each of the two previous years. Further, the economists say that bumper 1976 harvests could hold food price increases down well into next year. Farmers currently are harvesting what USDA says is their second largest wheat crop. The corn crop probably will be another record when it is harvested this fall, the USDA said. Although wheat is important as a bread grain, most of it is exported. Corn and soybeans make up the most important ingredients for live-

stock feed, which is translated into the nation's beef, pork, poultry and milk. Farm prices of oil seeds as a group, mainly soybeans, were up 23 per cent during the month. Soybeans gained \$1.29 a bushel from mid-May to \$6.16 a bushel.

*THE FEDERAL government plans to buy thousands of cases of surplus peaches, pears and apricots, according to Assemblyman John Thurman of Modesto, chairman of the Assembly Agriculture Committee. The assemblyman said the surplus canned fruit will be purchased for school lunch and elderly nutrition programs. The number of cases to be sold to the government depends on the price the government must pay, he said.

Youthful Influx
Nearly one farmer in five is now under the age of 35.

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VITAL STATISTICS

BIRTHS

MORGAN -- In Woodland, Sept. 1, '76, to Mr. and Mrs. Robert Morgan of Woodland, a daughter.
 MATTOS -- In Woodland, Aug. 31, '76, to Mr. and Mrs. David Mattos of Woodland, a daughter.
 LOHSE -- In Woodland, Aug. 25, '76, to Mr. and Mrs. Carlton Lohse of El Macero, a son.
 EDEN -- In Woodland, Aug. 26, '76, to Mr. and Mrs. Kevan Eden of Woodland, a son.
 MUNOZ -- In Woodland, Aug. 26, '76, to Mr. and Mrs. Ricardo Munoz of Woodland, a son.
 HAYES -- In Woodland, Aug. 26, '76, to Mr. and Mrs. Robert Hayes of Woodland, a son.
 WILSON -- In Woodland, Aug. 27, '76, to Mr. and Mrs. Wayne Wilson of Williams, a daughter.
 URRETIA -- In Woodland, Aug. 28, '76, to Mr. and Mrs. Lawrence Urretia of Maxwell, a daughter.
 PINON -- In Woodland, Aug. 29, '76, to Mr. and Mrs. Raphael Pinon of Dixon, twin sons.
 ARNOLD -- In Woodland, Aug. 29, '76, to Mr. and Mrs. Franklin Arnold of Woodland, a son.
 FUGATE -- In Woodland, Aug. 28, '76, to Mr. and Mrs. Mark Fugate of Davis, a daughter.
 MORROW -- In Woodland, Aug. 28, '76, to Mr. and Mrs. Ray Morrow of Davis, a daughter.
 MALDONADO -- In Woodland, Aug. 28, '76, to Mr. and Mrs. Jesse Maldonado of Dixon, a son.
 SANDERLIN -- In Woodland, Aug. 28, '76, to Mr. and Mrs. Clifford Sanderlin of Davis, a son.
 GARCIA -- In Woodland, Aug. 28, '76, to Mr. and Mrs. Leonides Garcia of Winters, a son.
 WILLARD -- In Woodland, Aug. 30, '76, to Mr. and Mrs. Rodney Willard of Winters, a daughter.
 TIETZ -- In Woodland, Aug. 29, '76, to Mr. and Mrs. Al Tietz of Willows, a son.
 FANDERLIN -- In Woodland, Aug. 28, '76, to Mr. and Mrs. Clifford Fanderlin of Davis, a son.
 WAYMAN -- In Woodland, Aug. 29, '76, to Mr. and Mrs. Donald Wayman of Arbuckle, a son.
 MUNOZ -- In Woodland, Aug. 29, '76, to Mr. and Mrs. Fernando Munoz of Woodland, a son.
 CHAVEZ -- In Woodland, Aug. 30, '76, to Mr. and Mrs. Filberto Chavez of Woodland, a daughter.
 MEDINA -- In Woodland, Aug. 31, '76, to Mr. and Mrs. William Medina of Woodland, a daughter.
 HAARBERG -- In Woodland, Aug. 30, '76, to Mr. and Mrs. Edwin Haarberg of Davis, a son.
 NIELSON -- In Woodland, Aug. 30, '76, to Mr. and Mrs. Kenneth Nielson of Davis, a son.
 CARY -- In Woodland, Aug. 30, '76, to Mr. and Mrs. Aaron Cary of Woodland, a son.

MARRIAGE LICENSES

FIELDS - GREEN -- In Woodland, Aug. 30, '76, to John Robert Fields, 30, of Little Rock, Ark., and Felicia Marie Green, 28, of Esparto.
 DEWBERRY - SANDERS -- In Woodland, Aug. 30, '76, to Garth Scott Dewberry, 18, and Connie Marie Sanders, 15, both of Woodland.
 FITE - BRANSCUM -- In Woodland, Aug. 30, '76, to Daniel Duane Fite, 27, of Paramount, and Carlene May Branscum, 16, of Woodland.
 BOWMAN - CASIAS -- In Woodland, Aug. 30, '76, to Charles Craig Bowman, 46, and Guadalupe Irene Casias, 30, both of Woodland.
 BROWN - KALLAS -- In Woodland, Aug. 30, '76, to Donald David Brown, 25, and Donna Jean Kallas, 26, both of Davis.
 TENNYSON - MELVILLE -- In Woodland, Aug. 27, '76, to Melvin Leon Tennyson, 21, and Mary Ann Melville, 21, both of Davis.
 STILLE -- HARPER -- In Woodland, Aug. 27, '76, to Gregory John Stille, 21, and Valerie Marie Harper, 19, both of Woodland.

MARRIAGE LICENSES

DOTY - WAITE -- In Woodland, Aug. 31, '76, to James Paul Doty, 22, and Vivian Kay Waite, 23, both of Woodland.
 GLIATTO - BRECKENRIDGE -- In Woodland, Aug. 27, '76, to John Richard Gliatto, 23, of Sacramento, and Rebecca Louise Breckenridge, 24, of Woodland.
 MAGOWAN - SEVERNS -- In Woodland, Aug. 26, '76, to Blair Cameron Magowan, 21, and Julie Ann Severns, 22, both of Davis.
 BLEDSOE - SKAGGS -- In Woodland, Aug. 26, '76, to Douglas Jay Bledsoe, 18, of Vacaville, and Kimberly Diane Skaggs, 15, of Winters.
 BAHLMAN - CAREAGA -- In Woodland, Aug. 26, '76, to Joe Criner Bahlman, 22, of Richmond, and Matilda Careaga, 21, of Esparto.
 HUWILER - HYLAND -- In Woodland, Aug. 26, '76, to David Dean Huwiler, 29, and Jennifer Lynn Hyland, 26, both of Davis.
 DYER - TRAUTT -- In Woodland, Aug. 24, '76, to Jeffrey Earl Dyer, 24, and Teresa Alice Trautt, 20, both of Woodland.
 LIEBAERT - BARLOW -- In Woodland, Aug. 25, '76, to Richard Maurice Liebaert, 27, and Anne Dorland Barlow, 25, both of Winters.

MARRIAGE DISSOLUTIONS

PRESTON -- In Woodland, Aug. 24, '76, Lyla A. and James H. Preston, petition filed.
 MATTOS -- In Woodland, Aug. 25, '76, Annette C. and Mick L. Mattos, petition filed.
 HUIE -- In Woodland, Aug. 25, '76, Linda D. and Dick Price Huie, final decree filed.
 TOVAR -- In Woodland, Aug. 26, '76, Caroline and Alberto Hernandez Tovar, petition filed.
 WRIGHT -- In Woodland, Aug. 26, '76, James Thomas and Maxine S. Wright, petition filed.
 DAWSON -- In Woodland, Aug. 26, '76, Sidney Wayne and Karen E. Dawson, interlocutory decree filed.
 MATHEWS -- In Woodland, Aug. 26, '76, Janice Lee and Robert Douglas Mathews, petition filed.
 STILLE -- In Woodland, Aug. 25, '76, Eugene Noel and Debby Jean Stille, petition filed.
 FISH -- In Woodland, Aug. 25, '76, Helen E. and Harold Lloyd S. Fish, petition filed.
 SMITH -- In Woodland, Aug. 25, '76, Lynn Ella and Nelson Lee Smith, petition filed.
 CORNELL -- In Woodland, Aug. 26, '76, Jean Corby and Ralph Edward Cornell, petition filed.
 BETTENCOURT -- In Woodland, Aug. 27, '76, Sharon Ann and John Clayton Bettencourt, final decree filed.
 HERREN -- In Woodland, Aug. 27, '76, Raylene C. and Terry L. Herren, final decree filed.
 ROTH -- In Woodland, Aug. 27, '76, Pauline R. and Russel C. Roth, petition filed.
 PIERCE -- In Woodland, Aug. 27, '76, Connie Susan and Michael Monroe Pierce, petition filed.
 TRAVIS -- In Woodland, Aug. 27, '76, Nathana Leah and John William Travis, interlocutory decree filed.
 SILVEIRA -- In Woodland, Aug. 27, '76, John J. and Ramona A. Silveira, final decree filed.
 CAFFERO -- In Woodland, Aug. 30, '76, William Marvin and Martha Anne Caffero, petition filed.
 WILLIAMS -- In Woodland, Aug. 30, '76, Christine Marilyn Zilius and Richard Brooks Williams, petition filed.
 WRIGHT -- In Woodland, Aug. 30, '76, Sharon Joye and Mark Edwin Wright, petition filed.
 MILLS -- In Woodland, Aug. 24, '76, James P. and Rebecca J. Mills, petition filed.
 COTTER -- In Woodland, Aug. 24, '76, Walter R. and Janice A. Cotter, petition filed.
 THAYER -- In Woodland, Aug. 23, '76, Robert L. and Linda W. Thayer, interlocutory decree filed.

MARRIAGE DISSOLUTIONS

SCHWARZ -- In Woodland, Aug. 24, '76, Doris Lorraine and Clifford Raymond Schwarz, interlocutory decree filed.
 FOSTER -- In Woodland, Aug. 24, '76, Ralph B. and Vera B. Foster, interlocutory decree filed.
 TORRES -- In Woodland, Aug. 24, '76, Leticia and Gustavo Torres, final decree filed.
 MOORE -- In Woodland, Aug. 23, '76, Sammie R. and Alma Moore, petition filed.
 MOORE -- In Woodland, Aug. 23, '76, Lawrence Dale and Judith Frances Moore, final decree filed.
 LINDQUIST -- In Woodland, Aug. 23, '76, Virginia T. and Michael J. Lindquist, interlocutory decree filed.
 BLOYD -- In Woodland, Aug. 30, '76, Gayle G. and Keith A. Bloyd, final decree filed.
 MILLER -- In Woodland, Aug. 30, '76, Leticia M. and Walter Miller, final decree filed.
 ALIPAZ -- In Woodland, Aug. 30, '76, Timothy A. and Jency A. Alipaz, interlocutory decree filed.
 WILLIAMSON -- In Woodland, Aug. 30, '76, Valerie and Marshall B. Williamson, interlocutory decree filed.
 VALINE -- In Woodland, Aug. 31, '76, Jan Christine and James Kelly Valine, interlocutory decree filed.
 COLLINS -- In Woodland, Aug. 31, '76, Evelyn and Albert E. Collins, interlocutory decree filed.
 WEINER -- In Woodland, Aug. 31, '76, Howard Jacob and Frances Julia Weiner, final decree filed.
 WADHOFFER -- In Woodland, Aug. 31, '76, Virginia Lee and Karl Malcolm Waidhofer, interlocutory decree filed.
 ROSE -- In Woodland, Aug. 31, '76, Michael Allen and Sandra Kay Rose, petition filed.
 DARIO -- In Woodland, Aug. 11, '76, Michael John and Sharon Annette Dario, interlocutory decree filed.
 GRIZZLE -- In Woodland, Aug. 11, '76, Betty Ola and Johnny Lee Grizzle, final decree filed.
 HARRIS -- In Woodland, Aug. 10, '76, Elaine Rose and Harold Louis Harris, petition filed.
 DIGGS -- In Woodland, Aug. 10, '76, Arlene G. and William K. Diggs, final decree filed.
 VAUGHN -- In Woodland, Aug. 11, '76, Frances and Barton Vaughn, petition filed.
 YANEZ -- In Woodland, Aug. 11, '76, Carol Dea and Roberto B. Yanez, final decree filed.
 FOSTER -- In Woodland, Aug. 12, '76, Anthony and Julia Airtia Foster, petition for annulment filed.
 ROWLEY -- In Woodland, Aug. 12, '76, Leila Marie and Lawrence Chester Rowley, interlocutory decree filed.
 BAUER -- In Woodland, Aug. 12, '76, Arnold J. and Julia Bauer, interlocutory decree filed.
 CIEMNY -- In Woodland, Aug. 12, '76, LaVonne and Ronald David Ciemny, petition filed.
 WOLFE -- In Woodland, Aug. 12, '76, George H. and Sarah E. Wolfe, petition filed.
 STURGEON -- In Woodland, Aug. 12, '76, Frances Eileen and Elmer Eugene Sturgeon Jr., petition filed.
 HEUER -- In Woodland, Aug. 13, '76, Della E. and Clarence H. Heuer, final decree filed.
 MALONE -- In Woodland, Aug. 13, '76, Terry A. and Patrick S. Malone, interlocutory decree filed.
 SILVEIRA -- In Woodland, Aug. 12, '76, John J. and Ramona A. Silveira, interlocutory decree filed.
 LAMBERT -- In Woodland, Aug. 12, '76, Joyce and Hubert L. Lambert, interlocutory decree filed.
 BAUER -- In Woodland, Aug. 12, '76, Arnold J. and Julia Bauer, interlocutory decree filed.
 BUNTIN -- In Woodland, Aug. 12, '76, Judith A. and Rickie W. Buntin, final decree for annulment filed.
 ROVITO -- In Woodland, Aug. 12, '76, Vicki and Orin J. Rovito, final decree filed.
 HUDSON -- In Woodland, Aug. 13, '76, Christine and Jerry Wayne

OBITUARIES

DUFFY -- Last rites were held in McNary's chapel for William Joseph Duffy Jr., 84, who received a degree in agriculture at Davis in 1916 and who began farming operations in the Sutter basin in 1923. He served for more than 30 years on the board of directors of the Rice Growers Association and on the board of directors of the Rice Institute at Biggs, which selected him twice as its 'man of the year'. He received the first distinguished alumni award to be presented by UC-Davis, and in 1973 was named agribusinessman of the year at the sixth annual farm-city banquet held in Woodland. He was author of 'Sutter Basin and Its People.' Active in fraternal and service clubs, he was a long time member of Woodland Rotary, of Grafton lodge, F&AM, of the Ben Ali Temple of the Shrine, and of the Jesters in Sacramento. Survivors include his wife, Marie, at the family home in El Macero; daughters, Elizabeth Hatcher of Woodland and Marjorie Fairlee of Fort Bragg; and grandchildren, Shelly Larson and Duffy Traynham, both of Woodland; Joann Galloway of Santa Rosa, Mimi Simonson of Illinois, Cathy Fairlee of Geyserville, Jill Swanson of Oakland and Duffy Fairlee of Fort Bragg. He also leaves five grandchildren and five brothers and sisters, including Clinton T. Duffy of Rossmore, nationally known for his work as warden of San Quentin prison.

JONES -- Last rites were held in Yuba City for Doria A. Jones, 49, daughter of Mary Bryant of Woodland and sister of Maxine Moody of Esparto and Tolah Bryant of Woodland.

O'ROURKE -- Roman Catholic rites were held in Woodland for James F. O'Rourke, 83, native of England, World War I veteran, and a member of Yolo post 77, American Legion. Survivors include his sister, Mrs. Charles S. Paynton of Woodland, two nieces and seven nephews.

KELLY -- Last rites were held in Oakland for Frank Cortez Kelly, 62, of Woodland, a trucker killed in an accident in Merced county. Mr. Kelly, who was born in Hawaii, was a member of Teamsters Local 150 of Sacramento and of the 'Empires' Association of the bay area. Survivors include his wife, Harriet; daughters, Christie Cue and Adele Copus, and three grandchildren. He also leaves three sisters, four brothers, an aunt and several cousins.

MARRIAGE DISSOLUTIONS

Hudson, interlocutory decree filed.
 NADLER -- In Woodland, Aug. 13, '76, Patricia Gail and Bruce David Nadler, final decree filed.
 BROWN -- In Woodland, Aug. 13, '76, Martha Gladys and Ralph Philip Brown, final decree filed.
 ALANIZ -- In Woodland, Aug. 13, '76, Robert R. and Stancia Y. Alaniz, final decree filed.
 AGUILAR -- In Woodland, Aug. 16, '76, Patricia L. and Luis A. Aguilar, petition filed.
 RATTLER -- In Woodland, Aug. 17, '76, Edward P. and Alice Rattler, petition filed.
 COBOS -- In Woodland, Aug. 17, '76, Irene Yvonne and Jose Luis Cobos, final decree filed.

TIPPIE -- Memorial services were held in Davis for Ernest L. Tipple, 60, a resident of the university community since 1947 and for 20 years a mechanical engineer with the UC-Davis agricultural engineering department. Survivors include his wife, Irene; sons, Ronald of Chicago, Ill., and Wayne of Van Nuys; his mother, two sisters and two grandsons.

RUSSELL -- Last rites were held at Kraft Brothers for Joseph Melvin Russell, 61, native of the Capay Valley and a carpenter and almond grower in the area. Mr. Russell was associated with the building trade for a quarter of a century, and was a past president of Local 1381, a director of the Capay Valley resource conservation district, and a member of Countryside Community church. In October of 1946, he and the former Rose Hatch were married; she survives him. Other survivors include two brothers, Milton of Madison and Richard of Capay; a sister, Helen Ender of Esparto, and nieces and nephews. His brother, Lowell, preceded him in death.

WYRSCH -- Last rites were held in Sacramento for Joe Wyrsh, 71, former resident of Woodland and brother of Anna Green of Knights Landing and Leo Wyrsh of Woodland.

RIOS -- Roman Catholic rites were held in Woodland for Ygnacio (Nash) Rios, 68, who managed the Yolo Fliers Club bar for more than 30 years. Survivors include his sons, Ygnacio Jr. and Henry, both of Sacramento, and Filbert of Santa Fe, N. M., and six daughters, Rachel Castenada of San Diego, Dolores Jimenez of Los Angeles, and Celia Jasso, Josephine Martin, Rose Romero and Gloria Chavez, all of Sacramento. He also leaves two brothers, 18 grandchildren, and nieces and nephews.

OLVERA -- McNary's chapel is in charge of rites for Maria T. Olvera, 74, native of Mexico, resident of Woodland, who had lived in Yolo county since 1934. Survivors include her husband, Santos Olvera, and sons, Augustine of Woodland and Rudolph of Sacramento, and daughters, Jessie Casias, Jovita Rodriguez, Sophie Marin and Lillie Florez, all of Woodland, and Angie Valdez and Linda Bastio, both of North Sacramento. There are 25 grandchildren and seven great grandchildren.

LARKE -- Memorial rites were held in Sacramento for Josephine M. Larke, 94, the widow of Leo E. Larke, with whom she operated a Winters area almond and apricot ranch for some years.

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17 Acres at Davis Making History --- and Fertilizer

University of California scientists are turning on soybean plants to make their own fertilizer.

Dr. Raymond C. Valentine reported at the American Chemical Society meeting in San Francisco that UC-Davis agronomists were applying principles of 'genetic engineering' to manipulate the nitrogen-fixing genes of soybeans.

These bacterial genes are contained in nodules on the roots of

the plant. Millions of these bacteria 'dance' on a pinhead inside bulbous-shaped nodules the size of green peas.

The bacteria supplied nitrogen fertilizer to the plant in return for carbon and energy provided by the host.

The process, said Valentine, translated into 'billions of dollars worth of nitrogen fertilizer annually.'

This, of course, eliminated the need for store-bought chemical nitrogen fertilizer which required dwindling natural gas to manufacture and was accused of being a potential threat to the environment.

At the same time, it has been demonstrated that many important crops -- corn and wheat, for example, -- have better yields when the concentrations of nitrogen fertilizer are increased.

Unfortunately, said Valentine, the 'chemical factories' in protein-rich soybean plants switched on and off, according to the supply of nitrogen in the atmosphere.

In other words, the 'factories' produced only in depression times and shut down in boom times.

THE UC-DAVIS team broke the genetic code in the bacterial genes so that their sensing mechanism was permanently 'turned off'

to atmospheric nitrogen.

'These bacteria think they're starved all the time, so they're constantly making more nitrogen,' said Valentine.

Only 19 acres of the soybeans are under cultivation in California -- 17 acres at Davis and two acres at UC-Riverside.

HIS MASTER'S VOICE —

104 BEAGLES GIVE THEIR ALL FOR HUMANITY

The story of the beagles at Davis surfaced at the symposium of the American Chemical Society, meeting in 172nd session in San Francisco.

For 68 months, 84 female beagles were forced to breathe air up to five times as polluted as humans inhale on a bad day in Los Angeles.

After doing this for 16 hours a day, seven days a week, the animals, along with 20 control dogs who breathed better air, were transferred from a health effects research laboratory in Cincinnati to UC-Davis.

There, they got better air, too. But after years of study, all 104

dogs were killed for the benefit of humanity.

That was 18 months ago.

Today, after one and one half years of post mortems, the major findings are lung lesions that veterinarian-toxicologist Jerry Stara said resembled early emphysema in man.

The local conclusion, drawn by other specialists, was that increases in urban air pollution would lead to the same results in man.

All the dogs exposed to the various air pollutants developed the lesions. That was 'the important point.'

From the early findings, it was also determined that heavy smog led to increased heart and nervous disorders.

And the scientists suspected the lesions progressed even after the dogs were removed from the polluted air chamber permanently.



Washington - The United States is planning to build the biggest windmill in history as part of its search for alternate sources of power for generating electricity.

Centerpiece of the government's experimental 1.5-megawatt (1,500-kilowatt) wind turbine electrical generating system, it will feature two slender fiberglass rotor blades spanning 200 feet, perched on a 150-foot tower.

The project will be directed by the National Aeronautics and Space Administration's Lewis Research Center, Cleveland, for the Energy Research and Development Administration.

The two agencies selected the team of General Electric Co. and United Technology Corp for negotiating a \$7 million contract to design, fabricate, assemble, install and test the system in 1978 at a site to be selected by ERDA.

While the system is considered experimental it will be located at a utility company site and supply electricity to the local electric system for public use, a NASA official said. Purpose of the test system is to determine the economics and operating characteristics of large wind turbines when coupled to conventional power plants.

The wind turbine (as modern electricity generating windmills are called) will rotate at 30 to 40 revolutions per minute in winds above 11 miles per hour. It will reach its full power output with winds of 22 mph. According to NSAS, such a machine will produce enough energy annually to supply more than 500 homes, if wind speeds average 18 mph.

When completed, the new 1.5 megawatt machine will succeed as the largest windmill ever built anywhere the 1.25 megawatt, 175-foot diameter Smith-Putnam system built in the 1940s at Grandpa's Knob at Rutland, Vt. The Vermont project encountered structural problems and, since it could not compete economically with the (then) low cost of fossil fuels, private funding was insufficient to perfect the system and it was abandoned.

Beagles were used in the experiments because they were 'well characterized' -- they have been selected enough times previously for research that information on them is readily available.

UCLA biochemist M. G. Mustafa fed rats and monkeys who were breathing oxidant -- a key smog ingredient -- quantities of Vitamin E, which is found in liver and other meats as well as fresh vegetables.

The lungs of animals breathing oxidant at Los Angeles basin levels showed marked improvement after eating the Vitamin E, Mustafa said.

'Some one with a poor diet and breathing high oxidant quantities puts himself in double jeopardy,' said Mustafa. This applies to smokers, he said, as inhaling cigarette tobacco sends large quantities of oxidant into the lungs.



SEPT. 6 - 12, 1976

A mellow moon and changing leaves.

Be careful driving now, kids are heading back to school ... E. Howe's sewing machine patented Sept. 10, 1846 ... Full moon Sept. 8 ... First apples will be ready for picking soon ... Average length of days for the week, 12 hours, 48 minutes ... Plutonium first weighed Sept. 10, 1942 ... California admitted to the Union Sept. 9, 1850 ... The time to think of marketing your crop is when you are growing it.



track of deaths by dropping a stone into a pot for every funeral that passed. When he himself died, a wag said that he too had gone to pot. But perhaps our research on this question has gone to pot.

Home Hints: You can wash your plastic shower curtain and window curtains in the washing machine, but don't put them in the dryer.

Ask the Old Farmer: Where did the expression "Gone to pot" come from? F.E., Colorado Springs.

We've heard tell that long ago a tailor in a small European town, who lived near a cemetery, kept

OLD FARMER'S WEATHER FORECASTS

New England: Week begins cloudy and cool, then very heavy rain and mild; cloudy over weekend.

Greater New York-New Jersey: Heavy rain to midweek, then sunny and hot.

Middle Atlantic Coastal: Possible offshore tropical storm by midweek; partly sunny and warm latter part.

Piedmont & Southeast Coastal: Heavy rain in central and east at first, then sunny and hot; showers continuing through latter part.

Florida: First part of week sunny with infrequent showers; hotter than normal latter part, some cooling on weekend.

Upstate N.Y.-Toronto & Montreal: Early week mostly cloudy and mild; some rain latter part, clearing up over weekend.

Greater Ohio Valley: Thundershowers at beginning and end of week, locally heavy; hot rest of week.

Deep South: Clear and hot by midweek; some showers in north latter part, in east on weekend.

Chicago & Southern Great Lakes: Rain at beginning and end of week; turning hot at week's end.

Northern Great Lakes: Sunny and warm through midweek; rain and cooler in central and east latter part.

Central Great Plains: Temperatures mild most of week, except on weekend; rain in west midweek and east at week's end.

Texas-Oklahoma: Cooling and rain by midweek, heavy in north and south; continued hot in central.

Rocky Mountain: Some showers except in southwest first part of week, then cooler; much cooler in north at end of week.

Southwest Desert: Cloudy, with showers in east through midweek; clearing and hot latter part.

Pacific Northwest: Week begins cloudy and mild; rain in north, lighter rain in south, after midweek.

California: Clear and hot to midweek in north and east, then milder; cloudy and cool along the coast latter part.

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Campus of Yuba College *OPENS* in Borrowed Quarters

Student registration for Yuba College's extensive program of college-level courses are being offered in Woodland.

The registration is taking place at the college's temporary facilities located in Wing D of the Douglass Jr. High School building at the corner of College and Hays streets. Students wishing to attend classes at the college's main campus in Marysville may also complete the registration process at the Woodland site.

The temporary facilities at the Douglass School, approved last week by trustees of the Woodland Joint Unified School District, will be used until the college's new Woodland Center opens in two months, Director Gene Hickey said. The new \$800,000 facility, located at 635 California Street, was scheduled to open by Sept. 13 but was delayed due to the Electrician's Union workers strike.

More than 100 separate courses

*Our troubles will be over if the forecast for next winter by the Scripps Institute of Oceanography turns out to be right. They are predicting 133% of normal rainfall in the Shasta river basin and 144% in the Feather River basin and from 167 to 178% in five southern river basins: San Joaquin, Kings, Kaweah, Tule and Kern. Project Hydrospect is an attempt to forecast rainfall a year in advance. Their first contact was with a local firm for \$170,000 over a three year period for the five southern basins. Harry Geise then got the call for these five basins. For 1972-73 Geise was right in predicting a wetter than normal year but was 9% too low for one basin and 12% too high for another. In 1973-74 Harry predicted a slightly drier year but it turned out to be slightly wetter. For 1974-75 he predicted a slightly below normal year but rainfall was normal. Geise dropped out and the state hired Scripps. For the 1975-76 year just concluded, they predicted the Shasta and Feather River Basins would have a wetter than normal season and the five

ses are being offered in Woodland by Yuba College this fall, Hickey said, and classes will proceed on schedule despite the complications arising from the seback of the permanent facilities. The room numbers at the Douglass Jr. High School have been changed to correspond with class schedules circulated in the Woodland area, and all hours, dates and instructors will be as listed.

Hickey also points out that his former office, located at 911 Court Street, has been closed, with all personnel and equipment relocated at the Douglass Jr. High School site. The telephone number -- 666-4454 -- will remain the same.

CLASS registration on a first-come, first-served basis will be conducted between 8 a.m. and 8 p.m. Monday through Thursday and from 8 a.m. until 4 p.m. on Friday. Amelia Gomez, a member of the college's counselling staff, will be on hand each day to assist students with the registration procedures.

Financial aid appointments and veterans' benefits appointments are being scheduled and students requiring these services must make appointments at the time of registration. William Sims, the college's financial aids officer, and Jean Taylor, the ve-

southern basins would have drier than normal years. All had very dry years. The Scripps process assumes weather can be predicted by ocean surface temperatures. Weather scientists at the Rand Corporation count on the effects of wind, evaporation and heat exchange for their data. They are trying to create mathematical models of the way weather works. The stakes are high. Had one San Joaquin Valley irrigation district known what the rainfall would be during a 16-year period they could have stored 18% more water and sold it for \$3 million. -- Ted Fourkas in the Bee.

terans' affairs officer, will be in Woodland several times before classes begin on Sept. 13.

There is no charge for the registration process or for the tuition-free instruction. Only costs that students will incur will be the \$2 student services fee which includes accidental injury insurance, the price of any textbooks that are used and the normal costs of personal living expenses.

Textbooks will go on sale beginning Sept. 7 at the Douglass School and will be made available on a first-come first-served basis. Class schedules are available at the Center and will be mailed to any one requesting one.

Additional information about Yuba College's programs or classes in Woodland may be obtained from Hickey or other college personnel at the Douglass School.

*THE RAINFALL season ended as the second driest in 127 years of weather records in the state capitol city. The 7.25 inches which fell in the July 1, 1975-June 30, 1976 season was the least rain since 1850-51, when the total was only 4.71 inches, the National Weather Service records revealed. Only 12 times had the precipitation been less than 10 inches in Sacramento. The heaviest rainfall in any one season was 36.35 inches in 1852-53. Sacramento's normal seasonal rainfall is 18.25 inches. The seasonal average at the Executive Airport, where weather records date back less than 50 years, is 17.30 inches. Scientists are unwilling to hazard an estimate on what the 1976-77 weather season will bring. A study of the extremely dry years in relation to following and preceding years offers few clues on what may come down. The record 1850-51 drought year was preceded by a rainfall of 36 inches in Sacramento and the following two years the seasonal rainfall was 17.98 and 36.35 inches. Figures give little com-



"Taking your money in a shopping bag and bringing your purchase home in your pocket is a sure sign of inflation."

fort, however, to those suffering from the 1975-76 drought.

*LIQUOR in metric size bottles is scheduled to begin in October, part of a 2 1/2 year program at the end of which all distilled spirits will be sold in six standard metric sizes. Next, on January 1, 1978 -- a year away -- you will start seeing ingredient lists on the labels of all domestic and imported alcoholic beverages. For the moment, metric and non-metric will co-exist, with both sizes on the shelves. After Jan. 1, 1980, when the non-metric sizes are eliminated, the labels will include the metric measures only.



Welcome Back... it's September!

Here's our list of things to clip and save and look out for this month... from your long time Friend of the Family.

- Enjoy a safe LABOR DAY weekend... our offices will be closed Monday the 6th so we can enjoy the day off with you.
- However... WE'LL BE OPEN ADMISSION DAY, Thursday the 9th, with regular hours 9 AM - 5 PM (College Greens 9 AM - 5:30 PM). Most other financial institutions will be closed to celebrate the 1850 date on which California was admitted to the Union.
- And, if you want to open a savings account, we'll admit you to any or all of these: REGULAR 5 1/4% PASSBOOK, 90 Day 5 1/2% PASSBOOK (minimum balance \$100), 90 Day 5 3/4% CERTIFICATE (minimum balance \$500) or any amount of \$1,000 or more in GUARANTEED RATE CERTIFICATES which pay 6 1/2%, 6 3/4%, 7 1/2%, or 7 3/4% on amounts of \$1,000 or more on deposit for 1 year, 30 months, 4 years or 6 years respectively (these accounts allow withdrawal prior to maturity only with substantial interest penalties). One or more of these accounts will fit your savings and investment goals... FSLIC insured to \$40,000 and more.
- And, if you work for yourself or don't have a retirement plan where you work, now's the time to START YOUR OWN OFFICIAL RETIREMENT PLAN. It'll pay off for you NOW, EVERY YEAR AT TAX TIME, as well as paying off big during retirement. Ask your Sacramento Savings and Loan office manager for either the Keogh Plan (self-employed) or the IRA (Individual Retirement Account)... do it now!
- And, speaking about the "Autumn" of your life... Fall begins Wednesday the 22nd.
- Since we like to help you save, come on in for your free map of Metropolitan Sacramento... you'll save time 'cause you'll know where you're going!



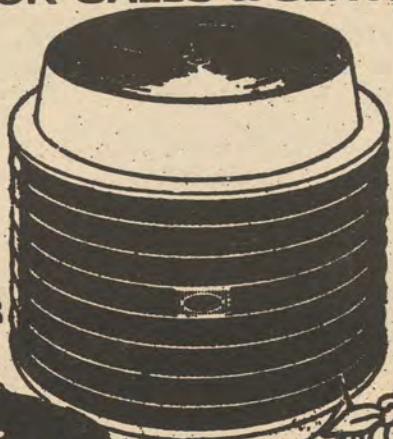
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THE GREASED PLOW

Now, in its research and development stage, comes the greased plow, a tool researchers at Auburn University, Auburn, Ala., say will speed agricultural products to market and improve efficiency in the use of energy.

Dr. William R. Gill of the U.S. Department of Agriculture's National Tillage Machine Laboratory says farmers face a universal problem -- sticky soil. He said soil with a high water content has often bogged down plowing efforts.

Gill said his research team, with the help of a number of manufacturers around the country, hopes to eliminate costly waiting while the soil dries to a point where it can be plowed.

'The possibility of plowing one or two weeks early without having to wait for the soil to dry and getting produce to the market before any one else means a better price.'

Another advantage of the lubricated plow is its efficiency in the use of energy. Friction is reduced by pumping a liquid polymer along the plow blade surface. Polymer is the same substance used by many metropolitan police departments for riot control, spraying it on street surfaces to make standing virtually impossible. An energy saving of as much as 25 to 30 per cent is realized over an untreated blade, Gill said.

There are slits in the plow blade surface to allow the polymer to ooze out. Spreading the substance along the blade is accomplished by soil action.

'A greased plow is what it amounts to except grease would contaminate the soil,' Gill said. 'The liquid polymer is absorbed into the soil and the soil's salt content eventually breaks it down.'

New Soviet order for 1976 U.S. wheat

Washington -- Soviet officials ordered another 275,000 metric tons of American 1976-crop wheat valued at \$34.6 million, the Agriculture Department said.

Spokesmen said the 10 million ushel purchase, which will be shipped after Oct. 1, brings total Russian grain orders for the 1976 season -- the first year in a five-year Soviet-American grain trade agreement -- to 4,624 million tons.

The sale was made by a private American trading firm and reported to the Agriculture Department under a program which requires traders to notify the government within 24 hours of deals exceeding 100,000 tons.

The long-term agreement negotiated in 1975 after the temporary embargo on American shipments to Russia, calls for minimum Soviet purchases of 6 million metric tons annually beginning Oct. 1. Russian officials can, under the deal, buy freely up to 8-million-ton level if they first consult with American government officials.

Agriculture department officials have said they expect Soviet purchases in the 1976-77 season to total about 8 million tons, less than half the 16.5 million tons the Russians ordered in the 1975-76 season on the heels of a poor 1975 harvest.

In addition to the 4.6 million metric tons of wheat and corn sold for 1976-77 delivery, traders also reported sales of 1.5 million metric tons of American soybeans to the Soviet Union.

Agricultural officials from England, Italy, Australia, South Africa, Japan and other countries have visited Auburn for a first-hand look at the greased plow. Success of the project hinges on the plow's efficiency percentage expense and the amount of liquid polymer that must be lugged about the fields on tractors. Field tests have indicated five to eight gallons of the substance is sufficient for an acre of farmland.

The project is an offshoot of the teflon coating on plow blades currently in use. However, the current abrasiveness of soil rapidly wears the teflon off.

'We're still looking for better ways to apply forces to the soil than just to drag tools through the soil as we've been doing for 4,000 years' said Gill.

*PRICES farmers get for raw agricultural products rose 2 per cent from May 15 to June 15, the third consecutive monthly increase, the Agriculture Department said. Higher prices for soybeans, corn and hogs contributed most to the increase, the Crop Reporting Board explained. Lower prices for cattle, apples and hay partially offset the gain. Farm prices rose 6.5 per cent in May and 2 per cent in April. They dropped 1.5 per cent in March and went up one-half of 1 per cent from Jan 15 to Feb. 15. Compared with the previous year, the June 15 farm price index was up 5 per cent. Prices farmers pay to meet expenses, meanwhile rose 1 per cent during the month and averaged 7 per cent above June 15 of last year.

FB OPPOSES

Opposition to the two controversial initiatives on the November ballot has been expressed officially by the California Farm Bureau.

A 'no' position was taken on Proposition 13, the dog racing initiative, and, to no one's surprise, the farm labor initiative, Proposition 14.

'We obviously are opposed to Proposition 14,' said CFB's president, Fred Heringer. 'However this is the first meeting of our board of directors since the unwise law qualified for the ballot.'

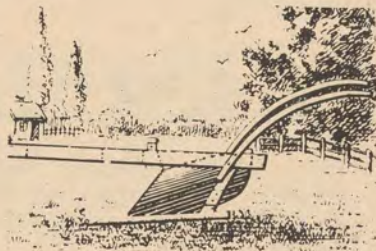
'We are against it because it would not establish any new farm worker rights that don't already exist under law, and would remove rights of farmers, and eliminate legislative control over the budget of the farm labor board.'

The bureau's directors, meeting at Cal Poly, San Luis Obispo, opposed the greyhound racing proposal as 'an additional form of gambling with questionable benefits for the public.'

In another action, FARM PAC (the Farm Bureau's political action committee) voted to donate \$50,000 to Citizens for a Fair Farm Labor Law to oppose Proposition 14. FARM PAC indicated further donations would follow.

The FB's recommendations: Prop. 1, housing bonds, no; Prop. 2, coastal bonds, no; Prop. 3, energy bonds, no; Prop. 4, UC regents, no; Prop. 5, interest rates, yes; Prop. 6, bill signing, no; Prop. 7, judges, yes; Prop. 8, county schools, no;

Prop. 9, state appointees, no; Prop. 10, local taxation, yes; Prop. 11, unsecured property tax, yes; Prop. 12, residential energy loans, no; Prop. 13, dog racing, no; Prop. 14, farm labor, no; Prop. 15, chiropractors, no position.



Between 1800 (above) and 1835 (below), plows showed design advances.

Record Almond Crop

Friday, August 6, marked the first delivery to the California Almond Growers Exchange for the 1976 almond season.

R. L. Griffith, of Williams, made his delivery to the Exchange's Arbuckle Receiving Station. Several early deliveries have also been received at the Exchange's Salida receiving station.

Exchange President Roger Baccigaluppi welcomed this first delivery of the 1976 season, saying that 'Our inventory of raw and manufactured almonds is low. Demand for almonds in 1975 was great enough to completely wipe out the large carry-over felt throughout the almond industry in 1974.'

The Exchange announced an opening of export and domestic prices to buyers at 88 cents per pound for Select Sheller Run on July 30.

Although a record crop is expected that could produce another carry-over similar to the one experienced in 1974, Baccigaluppi explained that this carry-over would be welcomed.

'This year, we are already working hard to catch up with requirements that have accumulated after our 1975 inventory was depleted. Demand for almonds is increasing and some carry-over is required to allow a continuity of supply to customers. This is much more desirable than an interruption in supplies each year just before the new season replenishes the inventory.'

Americans Report on Life on a Soviet Farm

Moscow -- Fifteen young Americans ended two months of observing and working on Soviet farms with respect for some of the workers they met but doubts about the efficiency of Soviet agriculture.

They cited oversupplies of labor, machinery that broke down and huge farms that were difficult to manage. Soviet farms, traditionally a weak link in the nation's economy, last year produced a decade-low grain harvest of 140 million tons.

The visit was the first Soviet-American student exchange to stress actual work on the farms of a host country. Organized by the national 4-H Foundation in Washington and the Soviet Agriculture Ministry, the Americans worked

in Byelorussia, a republic in the extreme west of the Soviet Union while 15 Soviet agricultural specialists spent the summer living and working with farm families in Illinois, South Dakota, Michigan, Iowa, North Dakota and Minnesota.

Thomas Dobbin, 26, agricultural economics graduate from the University of Idaho, comes from a 137-acre farm in Marsing, Idaho. He said he saw a lot of hard-working Russian farmers--including women. 'We were very impressed with the way women worked in Russia,' he said.

He said many of the more mechanized jobs on farms are done by men and that mechanical problems are common. 'They store

all the machinery outside and you would swear a machine that had seen only three seasons was ten years old,' Dobbin said.

The size of many Soviet farms was tremendous,' said Dobbin. 'You're talking about 40,000 hectares, (98,800 acres,) or 20,000 hectares here,' he said. 'The management problems on something like that are great.'

Workers at the larger complexes and state farms seemed to work not as hard as their counterparts on collective farms, the Americans said.

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Farm Bureau Monthly Primary Sources

What is the Farm Bureau?

"Yolo County Farm Bureau is a non-governmental, non-profit, voluntary membership, California corporation whose purpose is to protect and promote agricultural interests in Yolo County and to find solutions to problems of the farm, the farm home, and the rural community. Farm Bureau is California's largest farm organization, made up of 58 county Farm Bureaus currently. Together, they represent approximately 78,000 agricultural, associate, and collegiate members in 56 counties."

History of the Yolo County Farm Bureau: <https://www.yolofarmbureau.org/p/about/147>

What is 4-H?

In the late 1800's, researchers discovered adults in the farming community did not readily accept new agricultural developments on university campuses, but found that young people were open to new thinking and would experiment with new ideas and share their experiences with adults. In this way, rural youth programs introduced new agriculture technology to communities. The idea of practical and "hands-on" learning came from the desire to connect public school education to country life. Building community clubs to help solve agricultural challenges was a first step toward youth learning more about the industries in their community. A. B. Graham started a youth program in Clark County, Ohio, in 1902, which is considered the birth of 4-H in the United States. Jessie Field Shambaugh developed the clover pin with an H on each leaf in 1910, and by 1912 they were called 4-H clubs. The passage of the Smith-Lever Act in 1914 created the Cooperative Extension System at USDA and nationalized 4-H. By 1924, 4-H clubs were formed and the clover emblem was adopted. Today, 4-H kids complete hands-on projects in areas like health, science, agriculture and civic engagement in a positive environment where they receive guidance from adult mentors and are encouraged to take on proactive leadership roles."

More information about 4-H: <https://4-h.org/>

Definitions for article "The California Wheat Industry," from *Farm Bureau Monthly*, February 1931.

import	<i>verb</i> —bring (goods or services) into a country from abroad for sale. <i>noun</i> —a commodity, article, or service brought in from abroad for sale.
export	<i>verb</i> —send (goods or services) to another country for sale. <i>noun</i> —a commodity, article, or service sold abroad.
The World War (World War I)	also known as the First World War or the Great War, was a global war originating in Europe that lasted from July 28, 1914 to November 11, 1918.
Agricultural Extension Service	Agricultural extension is the application of scientific research and new knowledge to agricultural practices through farmer education.
consumer	a person who purchases goods and services for personal use.
Combined Harvester	A harvesting machine that efficiently combines three separate harvesting operations—reaping, threshing, and winnowing—into a single process.
stimulus	a thing that rouses activity or energy in someone or something; a spur or incentive.

Guiding Questions for Educators

Look at the covers of the three Farm Bureau Monthly publications.

1. What do you notice about the covers? Images? Dates? Cost of the publication?

Farm Bureau Monthly, February 1931

1. Read (either the students or the teacher) the article titled "The California Wheat Industry."

- Which states are named in the article?
- Which countries are named in the article?
- Which country imports more wheat than any other country?
- What are the four factors that effect wheat prices?
- Which country is named as a "potential source of a large supply [of wheat]?" Why?
- Why might farmers in Yolo County be interested in reading this article?

Farm Bureau Monthly, November 1930

1. Examine the advertisements on page 27.

- What are the businesses in these advertisements selling? Which advertisements mention farming and farmers? Why would advertisers mention farming specifically?

2. Have the class break into 5 groups. Each group will read about a designated Club from page 26: Madison 4-H Club, Plainfield 4-H, Capay Valley 4-H, Willow Oak Park 4-H Club, Zamora 4-H Club.

- Have the students talk, in their small groups, about what they just read.
 - a. What were the club's activities? Where are these clubs located in Yolo County?
 - b. Were there any words that they didn't understand?
 - c. Did they recognize any of the last names of the members?
 - d. Are any of the students involved in clubs?
 - e. Do they notice any similarities or differences between their clubs and these 4-H clubs from 1930?
- Have the groups share with each other. Either between two groups or as a whole-class discussion.

More advanced discussion topic:

After reading "The California Wheat Industry" article, what connections can you make between the growing, importing, and exporting of food during the 1930s and today? What was happening politically and economically in the 1930s that could influence and effect food production? What is happening today?

California **YOLO COUNTY**
FARM BUREAU
MONTHLY



The Greatest Hereford Show ever held West of the Rockies. Fifth annual Christmas Livestock Show and Rodeo, Nov. 29 to Dec. 6, at the Los Angeles Union Stock Yards. Pretty Ennid Zambune and Virginia Townsend coaxing this prize-winning Baldwin Ranch Hereford heifer to be present. Of course, she'll be there with about 500 other Herefords from all over the United States.

November, 1930

10c per copy

4-H CLUB

HEAD HEART HANDS HEALTH

DEPARTMENT

"TO MAKE THE BEST BETTER"

By W. G. WATERHOUSE

A UNIQUE 4-H CLUB

On the eastern side of Kern County across the Sierra from Bakersfield, a group of progressive people are reclaiming a desert.



Known as the Indian Wells Valley, this district has in the past presented to the pioneer all of the grim problems involved in conquering an arid waste. Things are better now. Electric power is available, and

pumps are more reliable. Where income warrants, electric stoves, refrigerators and other household helps are going in. More important than anything else, perhaps, is the discovery that alfalfa hay, which commands a premium on the Los Angeles market, can be produced here, and this type of farming is the basis of most of the development.

As a consequence of the improved conditions, farmers have begun to think in terms of community welfare, and to see what can be done to make their lives more interesting.

Last January a Farm Center was organized at the chief town, Inyokern, and a little later a Chamber of Commerce was formed. These organizations cooperate in the sponsorship of the local 4-H Club.

Since the club leader, H. A. Coppock, is also a teacher in the Inyokern school, and also because the youth of the Valley goes there to attend classes, the club membership was recruited at that place. Inyokern, as the name indicates, lies near the line between Kern and Inyo counties and is also near the San Bernardino County line. And so it happens that the president of the club, Burton Smith, lives in San Bernardino County; the vice-president, Henry Schutte, sleeps in Inyo County, and the secretary, Eleanor McConnell "comes to breakfast" in Kern. However, she claims to live in the Los Angeles city limits, although 145 miles from the City Hall, since her father is employed on that city's aqueduct and their home is on city property. The rest of the club, which has nine members, are also divided among the three counties. A club tour here is a real undertaking. If

one were to get into an automobile to make the rounds of the projects, the speedometer would register over 100 miles of desert and mountain road before the trip was completed. The members have figured out an easier way of seeing each others' projects. This fall they will all be brought together as the central feature of the Indian Wells Valley Fair. Not content with this, the club members are to be active in the construction of their community's exhibit at the Kern County Fair late in September.



Josephine Miller, a 4-H Club member in Yolo County, and her prize winning animal at the State Fair, 1930.

Mr. Coppock has brought his club together several times this summer despite the school vacation and the handicap of distance, for meetings filled with business and fun.

On several occasions the club has rallied as one to combat the introduction into their loved community of that disagreeable pest, the puncture vine. With hoes flying and breath coming in "short pants," for it grows warm here, they have cleared away the weed from the school yard, the community hall, and wherever else it reared its doomed head. This alfalfa community, especially since it receives a substantial premium for its clean hay, is grateful to these boys and girls.

A word about the members and their projects: President Burton Smith raises watermelons and we guess he is a popular lad these days. This sum-

mer he is also running the pump which takes fresh water 13 miles from the Valley to the West End Chemical Company plant at Searles Lake. During school days he drives fourteen and a half miles to high school at Inyokern from his home in the San Bernardino County mountains.

Henry Schutte, the vice-president, raises goats at his desert home. He has twelve miles to go to school, and has missed but one day in three years, due to a heavy fall of snow during a storm last winter.

The secretary, Eleanor McConnell (for this club is co-educational), chose turkeys for her project. Jack Hawkins keeps a record on his calf; Hazel Carr raises rabbits; James and Tom Earp are future poultrymen; Frances Carlson has turkeys; and Dorothy Hawkins, chickens.

The enthusiasm for club work and for the community welfare that these youngsters has shown augurs well for the future leadership of that section. May their tribe increase!

THE NEW 4-H CLUB YEAR IS NOW UNDER WAY

Are you a 4-H Club member? Do you have a boy or girl between the ages of 10 and 21 who lives in the country and who should be in 4-H Club work? Now is the time to investigate 4-H Club work in your district. Get in touch with your local volunteer club leader or write to the county farm advisor and they will tell you all about 4-H Club work. Join now so that you will have the benefits of the entire four-fold 4-H Club program.



Soledad 4-H Club demonstration team that presented their demonstration before the September meeting of the radio 4-H Club over KQW.

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FOUR-H CLUB DEPARTMENT

MADISON 4-H CLUB

The Madison Clothing Club called a special meeting September 30, inviting all boys and girls of the section interested in forming a livestock group as part of the Madison 4-H activities. Twelve boys and girls signed cards for the livestock work, several others were interested.

During the evening's business the Madison girls' club voted to accept the livestock boys and girls into their organization. Gertrude Coleman, Madison President, was in charge of the meeting. Mrs. Stites, local leader, spoke of plans for the County Achievement night. C. Coleman has volunteered to take over the leadership of the livestock work in the new group.

Those signing cards were as follows: Robert Hayes, Gilbert Adams, Alfred Meyers, G. E. Hiatt, Weldon Stites, Harold Mezger, Richard Buse, Darrel Cadenasso, Alfred Hayes, Frances Mezger, Jackson Hayes, Billy Hayes.

PLAINFIELD 4-H

The regular meeting of the Plainfield club for October was held Friday evening, October 10. The business of the evening included a charter discussion, laying plans for the Junior Livestock and Baby Beef Show and planning a program for fall activities. Plans for the November meeting include a talk by Prof. Gilmore and special music and games. December, a parents' and Christmas night being planned. Laverne Oeste, president of the club, presided over the meeting.

CAPAY VALLEY 4-H

Members of the Yolo County 4-H Clubs who were to exhibit at the Junior Livestock and Baby Beef Show in San Francisco were guests of the Capay 4-H Club at their October meeting. A regular business meeting was held under the direction of Marguerite Taylor, club president. Club convention reports were given to the club by Madeline Taylor, Cache Flesher, Marguerite Taylor and Laverne Oeste.

George Carter, Plainfield 4-H member, reported on the activities of the 4-H Clubs at the California State Fair.

Those representing the group going to San Francisco included George Carter, Eugene Chiles, Austin Chiles and Laverne Oeste. Each one of the above spoke about the animals which they were taking to the Junior livestock show.

Mr. Garfield Winter, acting local leader, spoke to the club members on general club activities.

WILLOW OAK PARK 4-H CLUB

A regular business meeting of the Willow Oak Park 4-H Club was held Friday, October 17 prior to the Center meeting. Club convention reports by Orval Blann and Jacqueline Hardy were given. Mrs. Gladys Agnes reported to the Club on the returns from the dance given for the benefit of the Club. The Club now has \$91.00 in the savings account and \$15.00 in a checking account.

A committee consisting of the Club officers and local adult leaders were appointed to score the Club for their charter application.

ZAMORA 4-H CLUB

Prior to the Center meeting at Zamora, 4-H Club met in the basement of the hall. A short business meeting was held at which new officers were elected as follows: President, Azelle Didion; Vice-President, Margaret Steufloten and Secretary, Forrest Wild. Following the election those who were leaving the Club because they were moving away gave speeches and the Club gave them all a cheer. Tom Mezger, retiring president, who has moved, then turned the meeting over to the new president. Those who are leaving the Zamora Club are Tom Mezger, Glen Landrus, Laurence Landrus, William Landrus, Warden Hunt and William Hunt.

SAN FRANCISCO SHOW

A carload of fat stock owned by Yolo County boys and girls went to the Junior Livestock and Baby Beef show, which was held at the Union Stocks Yards in South San Francisco.

The following were the entries made by Yolo County 4-H exhibitors:

Junior Shorthorn calf—Russel Bell.
Junior Aberdeen Angus calf—Leland Bell.

Hampshire lambs (two)—Russel Bell.

Hampshire pen of three lambs—Russel Bell.

Shropshire lamb—Laverne Oeste.
Shropshire lambs (3)—Russel Bell.

Shropshire lambs, pen of three—Russel Bell.

Southdown lambs—Virginia Miller.
Southdown lambs—Josephine Miller.

Southdown lambs—George Carter.
Southdown lambs (3)—Russel Bell.

Southdown, pen of three—Virginia Miller.

Southdown, pen of three—Josephine Miller.

Southdown, pen of three—George Carter.

Southdown, pen of three—Russel Bell.

Suffolk lambs—Russel Bell.

Suffolk lambs—Leland Bell.

Ramouillet lambs (3)—Russel Bell.

Ramouillet pen of three—Russel Bell.

Corriedale lambs—Russel Bell.

Duroc-Jersey barrow—Leland Bell.

Duroc-Jersey, pen of three—Leland Bell.

Hampshire barrow—Leland Bell.

Grade or crossbred (2)—Leland Bell.

Grade or crossbred, pen of three—Leland Bell.

4-H CLUB PROGRAM

Friday, Nov. 7—Madison 4-H Club.

Saturday, Nov. 8—County Club Council.

Friday, Nov. 14—Plainfield 4-H Club.

Saturday, Nov. 15—Capay Valley 4-H Club.

Tuesday, Nov. 18—Spring Lake 4-H Club.

Friday, Nov. 21—Willow Oak Park 4-H Club.

Friday, Nov. 28—Zamora 4-H Club.

Date not set—Dunnigan 4-H Club.

CENTER NOTES

(Continued from page 7)

Director Cleland appointed the following nominating committee at the conclusion of the meeting: L. J. Holmes, H. Reamer, G. Olson. Refreshments were part of the evening's success.

George Wilson, past president of the Yolo County Farm Bureau, presented arguments pro and con on the amendments which are to be voted upon at the coming election. He spoke in particular upon those affecting agriculture. Mr. Lester Holmes of Clarkburg substantiated many of Wilson's remarks. A regular business meeting was held under Director Fourness' direction. Reports and announcements concluded the evening's program.

The Home Department of the Madison Farm Center under Mrs. White, the home department chairman, presented an interesting program to the Center at their October meeting. Musical numbers and community singing were part of the program. Mr. Ed Leake furnished a cornet solo.

The speaker obtained for the occasion was Mrs. F. P. Wray of Davis, who spoke on "Responsibility of a Citizen."

Director Snyder held a business meeting preceding the home department portion of the program. Snyder appointed the following fire truck committee to meet with the Fire Commis-

sioners: Wm. Chaney, Roy Coleman, T. E. Tadlock and S. Sovereign. Refreshments concluded the ladies' night program.

After one year of 4-H club work in the Plainfield Center the 4-H members of the Plainfield club endeavored to show the center members some of their activities and accomplishments at the last Plainfield Center meeting.

The program arranged by the club

committee included the club pledge, club songs and short talks by club members. The introduction of all club speakers was done by the club president, Laverne Oeste. Club members and their topics were as follows: Organization report. Lura Allevne Henle, secretary; Woodland show, John Beckman; Tri-club meeting, Pedro Perez; California State Fair, 4-H Division, Josephine Miller; California

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February, 1931

10c per copy

Yolo County Farm Bureau Monthly

Compiled and edited by authority of Advisory Committee of County Farm Bureau in co-operation
with the California Farm Bureau Federation

Vol. X

Woodland, California, February, 1931

No. 2

The California Wheat Industry

By E. W. BRAUN, *Agricultural Extension Service*

The California wheat industry is directly affected by the world wheat situation. At one time California exported large amounts of wheat so that the price of wheat at San Francisco was on an export-price basis. Now California imports wheat in quantity, thus placing the San Francisco price on an import-price basis.

In 1890 California was the second largest wheat-producing State in the Union, with an average production of about 40,000,000 bushels. Shortly thereafter production began to decline and continued downward until 1913, when it reached a low point of 4.2 million bushels. Since then the trend has been upward; during the past five years production has averaged 13.5 million bushels annually.

The present production, however, supplies less than one-half of the wheat requirements of this State. During the four-year period 1926-1929 California imported an average of 16.2 million bushels annually in the form of grain and flour. The Pacific Northwest is the principal source of these import supplies, furnishing 50 per cent of the total. The Idaho region furnishes 37 per cent and is gaining in importance. The remaining 13 per cent comes from other States.

California is the nearest market for Pacific Northwest export wheat and flour. Approximately 20 per cent of the flour exports from the Pacific Northwest come to California. Other United States ports and the Orient offer an outlet for 26 per cent and 31 per cent, respectively. With wheat as grain the situation is somewhat different. California takes 1.5 million bushels, and approximately 26 million bushels is shipped to Europe. The remainder goes to other countries, principally Japan. In Europe, particularly

in Great Britain, it comes in direct competition with wheat from many parts of the world. Australian wheat is the same in nature as that of the Pacific Coast. The two are therefore direct competitors.

The price of wheat at San Francisco has followed a widely fluctuating course during the past twenty years. The average price for the five years just preceding the war was \$1.62 a hundred. During the war, when prices in general were high, the price of wheat rose to \$3.67; it fell precipitously in 1920-21 and 1921-22 to \$2.04 a hundred. In 1924-25 it again went very high, averaging \$2.90 a hundred for the season. Since that time it has, except for minor rises, fallen steadily. The average for the last five years is \$2.31 a hundred; the average for the last two years is \$2.11 a hundred.

There is a tendency for California wheat prices to fluctuate with wheat prices in eastern markets. This is due in part to the fact that all primary markets have a tendency to move in the same direction and in part to the fact that Idaho shipments are directed eastward as well as westward. Also, California draws some wheat from as far east as the Mississippi Valley. This price relation is not as close, however, as the relation between the San Francisco price and the Portland price, which in turn is closely related to the price at English markets.

Variations in the price of wheat from year to year at San Francisco are closely related to the year-to-year price changes at Portland, and to those in Liverpool and London. This is due to the fact that the Pacific Northwest ships wheat and flour to California and to Europe throughout the year. The price of California wheat at San Francisco tends to be above the Port-

land price by the amount of the expenses incurred in bringing wheat from Portland to California. During the nine years 1921-1929 Liverpool and London prices averaged 16 cents a bushel above San Francisco, which in turn was 10 cents a bushel above the price at Portland.

Because Great Britain imports more wheat than any other country and draws it from many parts of the world, the most representative world wheat prices are those established at Liverpool and London. The world wheat price movement from one season to another is affected principally by four factors: first, the volume of production in the principal exporting areas; second, the size of the European crop; third, the carryover of wheat in exporting countries and in Great Britain; fourth, changes in the buying power of consumers. It must be remembered, however, that these factors do not exert an equal influence on the price of wheat, nor do the same ones operate in the same direction each year.

The future trend of wheat production in Canada, United States, Argentina and Australia—the principal wheat-exporting countries—and also Russia, will have an important bearing upon the world level of wheat prices. During the past twenty years the most significant expansion has taken place in Canada and Argentina, the average annual increase being 15 million and 5.5 millions bushels, respectively. There is no apparent change in these trends. Since the World War the most significant expansion has taken place in Europe. This increase in Europe has been in the nature of a recovery from the decline in production which occurred during the war. Russia, however, ap-

(Continued on page 30)

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Canary Seed, Cuttle Bone,
Bird Remedies

House Fly Spray, Dairy Fly Spray,
Spray Pumps

SOLVO-TEX used in households
and dairies for softening water
Plants, Shrubs, Bulbs and Seeds
in season

Garden Tools, Flower Pots, Vases,
Garden Hose

And many other articles are
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Epperson & Fisher

Court and College Streets

Phone 53

Woodland, California

FOUR-H CLUB DEPARTMENT

CLUB SCHEDULE

The following meeting schedule has been adopted by the County Club Council and will be the official meeting time of the various clubs:

First Tuesday, Zamora Clothing Club, February 3.

First Thursday, Zamora 4-H Club, February 5.

First Friday, Madison 4-H Club, February 6.

First Friday, Dunnigan 4-H Club, February 6.

Second Tuesday, Capay Valley 4-H Club, February 10.

Second Thursday, Yolo 4-H Club, February 12.

Second Friday, Plainfield 4-H Club, February 13.

Second Friday, Spring Lake 4-H Club, February 13.

Second Friday, Winters Clothing Club, February 13.

Second Saturday, Madison Clothing Club, February 14.

Second Saturday, Willow Oak Park Clothing Club, February 14.

Third Friday, Willow Oak Park 4-H Club, February 20.

Fourth Friday, Winters Clothing Club, February 27.

Every Tuesday, Dunnigan Clothing Club.

COUNTY CLUB COUNCIL

Reference has been made often recently in connection with 4-H Club work of the organization known as the County Club Council. Every organization of any size usually has a governing body or group of people who determine the policies of that organization. Governing 4-H Club work in a way is the function of the County Club Council.

The Council is made up of 4-H Club leaders from the various clubs in the county 4-H committeemen who have been appointed by the Farm Center directors and members of the agricultural extension staff of the county who sit upon this Council in an advisory capacity. In short the County Club Council is related to 4-H Club work in somewhat the same manner as the board of directors of the county Farm Bureau are related to their farm centers.

The Council has adopted a plan of meeting every two months during the year. They have their duly elected officers which for the year 1931 are: D. F. Snyder, chairman; Mrs. Leland Stites, vice-chairman and Mrs. Ralph Blann, secretary.

At the January meeting of the County Club Council several items of importance were acted upon and in brief are as follows:

The leaders passed a resolution requesting the Yolo County Farm Bureau board of directors to form a 4-H club department within the county organization. The purpose of the recommendation being for a closer relationship between the two organizations and representation of the Council chairman on the County Board.

Another item of interest is that the 4-H Clothing Clubs will be offered an opportunity to exhibit at the annual livestock show their clothing work. The date for this county function has been set for Saturday, May 9.

One of the functions of the Council is that a portion of the meetings are set aside for leadership training. This usually is done in two groups. The Clothing Club leaders, meeting with Miss Liles and the livestock group meeting as a committee to consider the problems in connection with the livestock clubs.

This organization of club leaders and committeemen has grown gradually during the past few years until at present the County Club Council is one of the most active groups within the Farm Bureau organization. The 4-H Club leaders are proud of their organization, however, are open for any and all suggestions for the good of club work.

THE CALIFORNIA WHEAT INDUSTRY

(Continued from page 3)

pears to be the potential source of a large supply. If large-scale farming operations now being carried out by the Russian government prove successful it is likely that Russia will soon be an important factor in international trade in wheat.

The combined harvester, which greatly reduces the cost of harvesting, is coming into extensive use and is a stimulus to increased wheat acreage, particularly in those areas which are now not profitable for growing wheat but which may be made profitable by the use of modern machinery.

During the immediate future the trend of wheat production in Europe, with its consequent effect upon the world wheat price, will very largely determine the price that may be expected for California wheat. The year-to-year outlook for California will be given in annual outlook reports.

YOLO COUNTY
FARM BUREAU
Mr. C. A. Eckhardt,
Tancred,
California.
MONTHLY

HAPPY NEW YEAR



Robert Bell, 4-H Club member of Woodland, Yolo County, and his Grand Champion Baby Beef of the Junior Livestock and Baby Beef Show at South San Francisco. This animal, which weighed 1010 pounds, was purchased for 51 cents a pound by the Oakland Meat and Packing Company for the Washington Market. Robert started in 4-H Club work in Inyo County more than eight years ago. He had four years of 4-H Club work, and completed four years of Smith-Hughes high school agricultural work, and is now back in 4-H Club work.

JANUARY, 1933

PRICE 10c



226 Buckeye Street Woodland, CA 95695 | archives@yolocounty.org | 530-666-8010
Farm Bureau Collection, Box 2. Acc. #1995-26

FARMERS' PICNIC

(Organization of Farm Bureau)

AT YOLO

Saturday, All Day, March 7th, 1914

PROGRAM

MORNING

10:00—Music—Winters brass band—20 pieces

10:30—Meeting called to order by J. E. Scarlett of Yolo—Election of Temporary Chairman and Secretary.

10:40—"The Reason" M. H. Stitt, of Guinda.

Outline of work and adoption of Farm bureau constitution; conducted by Prof. B. H. Crocheron, of Washington, D. C.

11:15—"How to Judge a Dairy Cow;" Demonstration with a live cow on the stage, by Dean Van Norman, of the University Farm School, who is also President National Dairymen's Association.

11:45—Address, Judge Peter J. Shields, Superior Court, Sacramento.

Recess until 1:30 P. M. Old fashioned picnic. Bring your baskets. Hot coffee, cream and sugar will be served by the ladies of Yolo. (A chicken dinner will be served those who do not bring lunch, for a small fee.)

AFTERNOON

1:00—Music by the band.

1:30—Address, Prof. Crocheron; U. S. Agricultural Department, Washington, D. C.; "The Duty of the Farm Adviser."

2:00—Election of officers of Yolo County Farm Bureau.

2:15—Address, Chas. W. Shaw, University of California, Berkeley.

2:45—Address, "Yolo County's Highway Problem" by Chas. F. Stern, Member California Highway Commission.

Every arrangement is being made for the comfort of guests while at Yolo. There will be good music, good speaking and a general good time for every person who attends.

Bring your basket, well filled; bring the family and tell your neighbor about it.

LET'S ALL GO

To Yolo, Saturday, March 7th, All Day, 1914

START YOUR OWN GARDEN - LETTUCE

YCHC
Yolo County Historical Collection

LEVEL
K-6



MATERIALS

Three to six packets of lettuce seeds of various varieties
Potting soil
Planting containers
Gardening gloves
Spray bottle or small watering can

OBJECTIVE

Learn about the growth cycle of plants and how to create your own indoor garden.

VOCABULARY

Seed varieties | Potting soil | Plant | Harvest

STEP 1

Select what type of lettuce varieties you would like to grow. Look for quick-maturing varieties, such as 'Tom Thumb' or 'Black Seeded Simpson'. See the attached list of lettuce varieties.

STEP 4

Continue to water your seeds. Track the growth of your plants using the attached Lettuce Growth Chart. If you want to add another element, you can try growing the plants in different locations.

STEP 2

Select a space for your lettuce garden. Locate a window that provides the most sunlight possible. Generally windows facing the south receive the most sunlight followed by those facing west. Optimally, choose a location that received 8 or more hours of sunlight.

STEP 5

Once the leaves on the greens are a few inches tall, it's time to start harvesting. Remember that you won't be growing full heads of lettuce. Harvest a few leaves at a time from each plant and then let them grow again. Using scissors simply cut the greens 1 inch above the soil line, leaving a few larger leaves in the center to keep plants healthy. Lettuce will grow back to yield another harvest in a couple of weeks. After a few harvests the plant stems may get thick and the leaves may remain small. This indicates it's time to compost the potting mix and roots, and start over.

STEP 3

Once your site is selected, have fill containers with moistened potting soil. Either small individual pots or trays can be used. Plant the seeds as directed. Most lettuce seeds should be planted about 1 inch apart and just barely covered with soil. Laying a ruler across the surface of the soil to measure the distance evenly. Gently moisten the soil with water.

PLANT MORE!

- Check out <https://kidsgardening.org/lesson-plans/> for more gardening activities.

Share your finished projects on Facebook or Instagram and be sure to tag @YoloArts!

START YOUR OWN GARDEN - LETTUCE

YCHC
Yolo County Historical Collection

**LEVEL
K-6**



LETTUCE VARIETIES

Lettuce	Description	Lettuce	Description
Tom Thumb	Small cabbage-like green heads	Crisphead	Green leaves on the outside, white and crisp on the inside
Black Seeded Simpson	A leaf lettuce with large, upright heads of broad, frilled, light green leaves		
Romaine	Deep green, long leaves	Butterhead	Large, soft, and tender leaves
		Leaf, try a baby leaf mix	Curly leaf and broad, found as green and red leaf varieties



KWL CHART

KWL Chart

What do you know ?	What do you want to know?
<ul style="list-style-type: none"> - Lettuce is good for you - Common lettuce types include romaine, and butterhead - Spinach is not a type of lettuce, but is great in salads and good for you 	<ul style="list-style-type: none"> - How long does it take to grow lettuce? - Why is lettuce good for you?
What did you learn ?	

GROWTH CHART

Lettuce	Expected Growth Rate	Location	Week 1	Week 2	Week 3	Week 4	Week 5
Romaine	28 days baby, 55 full size	Grow lights					
		Windowsill					

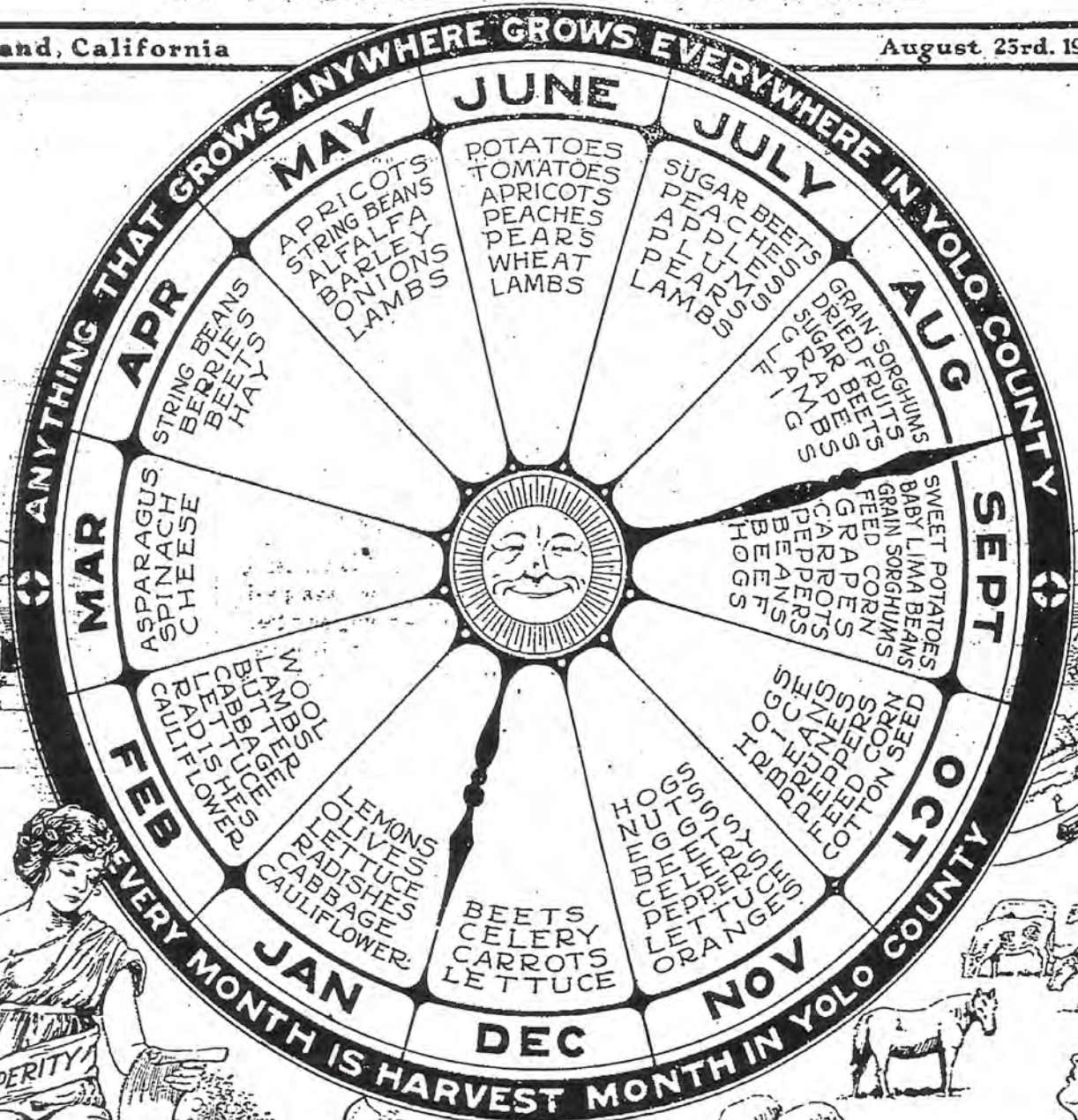
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YOLO COUNTY

IN WORD AND PICTURE

Woodland, California

August 23rd. 1926.



RICE



Rice has opened up a new industry for lands which had been deemed unfit for anything but wheat, on account of the clay soil conditions.

Rice in the Valley

Rice production and consumption has grown steadily since the early 1900s.

The first commercial rice crop was cultivated in Butte County in 1912. In 1915, the first successful experimental rice crop of six acres was harvested by Dickison Stephens on the Oakdale Ranch along Cache Creek, in what is now Esparto. Rice seemed to thrive in the dense and clay-like soil of Yolo County.

The Japanese rice variety, with its short grain, high yield and grain uniformity, grew particularly well in the climate of Yolo County. Due to the hot and dry spring and summer, rice could be grown from April until October.

The primary challenge for rice farmers at the beginning of the 20th century was insufficient irrigation systems. Rice crops must be submerged in water to grow effectively, so establishing irrigation channels became a top priority for many farmers.



Year	Acreage devoted to rice cultivation	Bushels of rice produced	Average price per bushel produced
1912	1,400	70,000	\$1.09
1913	6,100	293,000	\$1.00
1914	15,000	800,000	\$1.00
1915	34,000	2,268,000	\$1.11
1916	53,000	3,263,000	\$1.28
1917	80,000	5,600,000	\$1.75
1918	106,220	7,011,000	\$1.90
1919	142,000	7,881,000	\$2.67
1920	162,000	9,720,000	\$1.21

WHEAT



Timeline

1850 *Ploughs and scythes are the most common farming tools.*

1852 *Horse drawn threshing machines separate hay from straw.*

1862 *Alternating years of flood and drought destroy crops and lead to the need for irrigation.*

1863 *drought destroy crops and lead to the need for irrigation.*

1864 *Union Pacific Railroad comes to Woodland and increases commerce throughout CA.*

1877 *Byron Jackson invents the Jackson hayfork which moves hay more easily from the fields into barn lofts for storage.*

1885 *Daniel Best invents steam powered tractor that replaces horse-powered mechanisms.*

1890 *Wheat becomes Yolo County's major crop with four operational grain mills.*

Wheat in the Valley

Rice production and consumption has grown steadily since the early 1890s.

Many pioneers came to California in 1850 in search of gold, but they found something much more precious, wheat!

Pioneers who came from the Midwest knew about farming and found that California's nutrient rich soil and temperate climate made it perfect for growing wheat, barley and corn. Lacking sophisticated implements they created implements from wood, steel and horsepower to plow, seed and harvest their fields. The region's soil and climate made it ideal for dry farming, meaning it did not require irrigation.

In 1890 wheat became Yolo County's top crop. The use of irrigation increased the yield of the crop. With the invention and implementation of steam engines to harvest, wheat became the number one export in the region.

In 1893, because of competition from Midwest farmers, and the high cost of transportation, the California wheat market crashed and wheat farmers went bankrupt. Farmers had to turn to planting other crops, such as fruit to survive.

Wheat is still grown in Yolo County today, but not to the level that it was grown and harvested in the late 1800s.



TOMATOES



Fun Facts

Tomato Genetics Stock Center at UCD Davis has more than 2,750 genetic varieties of tomatoes.

Each man, woman and child in America consumes almost 80 pounds of tomatoes each year.

California is the largest producer of tomatoes, with 9 out of 10 tomatoes coming from the golden state.

Tomato season is July through September and harvesters run 24 hrs a day.



Tomatoes in the Valley

Automation in the 1950s revolutionized tomato harvesting and food production in Yolo County.

From hand picking to machine harvesting, advances in agriculture during the 1950's were the result of farmers and scientists working together to create more abundant and efficient ways to grow crops.

On major challenge to tomato harvesting is the tomato plant itself. Tomatoes were delicate and did not ripen uniformly so it was necessary to send farm laborers into the fields to hand pick tomatoes as they ripened. One of the first steps toward mechanized harvesting was developing a tomato that ripened over a short period of time and was adaptable for machine harvesting by having a thick skin. Jack Hanna, a plant geneticist at UC Davis developed a variety of tomato which more hearty and could be machine harvested.

Mechanization was part of the United State's ability to be competitive in the agriculture market. Mechanization also fueled the tomato industry as processing and canning plants expanded in the central valley and ketchup became a staple of the American diet.

ART + AGRICULTURE



LEVEL
K-12



MATERIALS

Watercolor Papers
Pencils
Extra Fine Tip Sharpies
Watercolor Palettes
Paint Brushes
Cups for Water
Color Wheel (optional)

VOCABULARY

Composition | Foreground | Middleground
Background | Color | Line | Contour
Primary Colors | Secondary Colors
Tertiary Colors

OBJECTIVE

Students will understand the importance of close observation in drawing, color theory, and basic watercolor painting techniques.

ADAPTATIONS

Extend the lesson by having the students draw the environment around their still life composition after Step 2. The environment should be outlined and painted as directed in Step 3.

STEP 1

As a class, work together to create two still life compositions with the faux produce provided. Discuss the compositions created.

Which fruits or vegetables are more prominent? What shapes make up the different objects, how would you draw them?

What colors are needed to paint this composition? If mixing colors, discuss primary, secondary, and tertiary colors.

STEP 2

Give students 3 sheets of scrap paper, set a timer for 2-3 minutes, and instruct students to remain quiet for focus, keep their eyes on the still life composition, not to look at their paper, and to draw their still life using one continuous line. Prompt students to pay close attention to each objects unique physical attributes as they draw and to go slowly. Once students have practiced their blind contour drawings a few times, set a timer for 5-10 minutes and have students do one more on their sheet of Watercolor Paper.

STEP 3

Have students outline their drawing with sharpie. Next, have students paint their drawing. This is a great time to recall any earlier discussions about color theory.

STEP 4

As a class, have students share their paintings. Have students reflect on their compositions - Which areas did they enjoy drawing/painting? Which areas did they find challenging? What might they do differently in the future?

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