



University of California  
Cooperative Extension

***Annual Report***  
Mendocino County 1997-98

Ag. Center/Courthouse  
579 Low Gap Road  
Ukiah, CA 95482-3734

July 21, 1998

To the Mendocino County Board of Supervisors

Michael Delbar, 1<sup>st</sup> District

Patti Campbell, 4<sup>th</sup> District

Richard Shoemaker, 2<sup>nd</sup> District

Charles Peterson, 5<sup>th</sup> District

John Pinches, 3<sup>rd</sup> District

We are pleased to submit the University of California Cooperative Extension - Mendocino County (Farm Advisor) Annual Report for 1997-98. The report highlights a few of our accomplishments and activities. We welcome your comments and suggestions.

Staff continue to seek out creative methods to conduct research and provide educational programs to meet the needs of the people of Mendocino County.

I'd like to thank each of you for your continuing support of our activities and efforts in helping sustain a vital agriculture, environment and community in Mendocino County.

Sincerely,

John M. Harper  
UCCE Livestock & Natural Resources Advisor  
Director - Mendocino County

Cover photo: Field Fence by Greg Giusti



## Program Description

The University of California Cooperative Extension in Mendocino County is part of a statewide system that makes UC research-based information available to local agencies, industries, and the public. Our mission is to sustain a vital agriculture, environment, and community in Mendocino County by providing University of California research-based information on management, nutrition, and youth development. In Mendocino County we are also known as the Farm Advisor's Office.

Our programs operate through a unique partnership between county government, the UC system, support from the USDA, and other private funds. Backed by the resources of the UC campuses, our educational programs use practically-applied research to solve community problems. We consult with individuals and organizations, publish newsletters, produce information for mass media, and conduct seminars and workshops.

### University Staff

**John Harper**, Livestock and Natural Resources Advisor for Mendocino/Lake Counties and Mendocino County Director

**Glenn McGourty**, Viticulture and Plant Science Advisor for Mendocino/Lake Counties

**Evelyn Conklin-Ginop**, 4-H Youth Development Advisor and CE Home Economist

**Gregory Giusti**, Forest and Wildlands Ecology Advisor and North Coast Area Hardwoods Advisor

**Peter Passof**, Forest Advisor, Emeritus

**Linda Edgington**, Inland 4-H and Food Stamp Nutrition Education Program Representative

**Arlene Fuller**, Coast 4-H Program Representative

### Cross County UC Assignments

**Rachel Elkins**, Pomology Advisor for Lake/Mendocino Counties

**Susan McBride**, Marine Advisor for Humboldt, Del Norte and Mendocino Counties

**Lucia Varela**, North Coast Integrated Pest Management Advisor

**Adina Merenlender**, Integrated Hardwood Management Program Specialist

### County Staff

**Linda Blatchford**, Administrative Aide and Office Manager

**Erin Ruddick**, Agriculture Technologist

**Julie Price**, Agriculture Technologist

**Carol Gottfried**, Clerk II and 4-H Secretary

## 4-H Youth Development and Human Resources

### 4-H Program

Two new 4-H Program Representatives were hired through the University and some grant funding to help expand Mendocino County's 4-H program. Arlene Fuller is now working with the Coastal 4-H programs, and Linda Edgington is working with the inland programs. These paraprofessionals will concentrate on expanding club membership and developing additional non-animal projects such as home economics, gardening, wildlife, photography, welding, etc. **Currently, nearly 1,500 youth are enrolled in 4-H programs representing almost 8% Mendocino County youth with almost 250 adult volunteers.**

Recent 4-H activities include:

- Successful Completion of 4-H Summer Camp:** This year **186** 4-H campers and counselors from Lake and Mendocino Counties plus **23** adult volunteers enjoyed camping with a Tropical Theme in Anderson Valley. Activities included rifle and archery ranges, arts and crafts, swimming and canoeing, fishing, hiking, and sports.
- High 4-H Tennessee Exchange:** Completing the second half of a two-year interstate exchange 21 high school 4-H'ers and two adult chaperones traveled to Lincoln County, Tennessee. (The Tennessee 4-H'ers visited us last year.) They were kept busy touring Tennessee Walking Horse farms, a tobacco farm, a beekeeping operation, and a sod farm. They also participated in a variety of social activities (including an overnigher in a cave) which allowed them to experience the different lifestyle of rural Tennessee youth where the temperature/humidity heat index soared to 107 degrees and lightning storms sent them scurrying for shelter!
- Afterschool day-care program:** The Mendocino County 4-H program continues to work with the various school districts to provide supervised After School Day Care programs. Educational materials and training are provided to the day care sites. This year a pilot project utilizing high school students as mentors was begun and looks promising.

## Two Mendocino 4-H Programs Receive Awards

State 4-H Community Service Awards were earned by Mendocino T.R.A.I.L. (\$1,000) and the Navajo Churro Project (\$500) taking first and second place in the state among 22 programs.

– T.R.A.I.L. is a program for physical therapy through horseback riding and the name stands for **Teaching Riding as an Access to Independence and Learning.**

– The purpose of the Navajo Churro project is to help rebuild flocks of these selected sheep that are listed as an endangered species. The project donates sheep and wool to traditional Navajo or Dineh weavers among other activities.

## Food Stamp Nutrition Education Program

With the change in the new Welfare Reform Laws and the number of families in Mendocino County receiving food stamps, it became obvious to Advisor Evelyn Conklin-Ginop that there was a need to provide an educational program to assist families in making better and healthier food choices within their budget. Advisor Conklin-Ginop received a grant from the USDA to hire a half-time paraprofessional (Linda Edgington) to develop and conduct this county program.

Linda Edgington has been working with several agencies in town including: County Social Services, Alcohol and Other Drug Program (AODP), and North Coast Opportunities Head Start. She will soon be working with the Young Parents program at Ukiah High School. In addition to classes on nutrition, she often includes food preparation and food safety techniques.

## Livestock and Natural Resources

### Educational Programs

- ❑ Advisor John Harper created a computerized template that assists landowners in preparing a Letter of Intent that will show voluntary compliance in identifying non-point source pollution (NPS), best management practices (BMP) and monitoring by rangeland owners as

required by the EPA and legislation. Now used statewide by other Advisors in the Rangeland Watershed Water Quality Planning Program created by UC Specialists Mel George and Ken Tate.

- ❑ Locally, **45** ranchers representing **35** ranches and **100,000 acres** of rangeland in Mendocino, Lake and Humboldt Counties completed Advisor Harper's pilot Water Quality Planning Short Course with 50% of participants completing Water Quality Plans or Letters of Intent representing voluntary compliance on **50,000** acres to date.
- ❑ Completed Tomki Watershed Restoration Video which demonstrates BMP's and watershed planning.
- ❑ Classes/Workshops: Cow/Calf Quality Assurance Program – **120** Ranchers received certificates; six-week, three-hour SHEEP 101 short course attended by **75** sheep producers; held several Grass Identification Field Days at UC's Hopland Research and Extension Center (HREC) over two year period – **100** participants; three-session short course designed to increase ranch profitability, Back in the Black, attended by **21** cattlemen and women.
- ❑ Established first UC Cooperative Extension Livestock/Natural Resources World Wide Web Pages on the Internet and prepared over **70** web pages on Livestock and Natural Resources topics which have been visited by more than **9,000** from all over the world. More importantly, landowners in Mendocino County have greater access to UCCE livestock and natural resources information.

## Research

- ❑ **North Coast Rangeland Watershed and Water Quality Study:** The Livestock & Natural Resources Advisor assembled a unique team of collaborators including Ken Tate, UC Davis Rangeland Hydrologist; Barbara Allen-Diaz, UC Berkeley Range Ecologist; Randy Dahlgren, UC Davis Soils and Water Chemist; and Rob Atwill, UC Davis Veterinarian. Received \$37,000 to begin long-term watershed study.

The objectives include:

- To develop the experimental watershed infrastructure required to conduct applied rangeland watershed research to better

understand watershed function and the impacts of grazing management on vegetation, soils, hydrology, water quality, and thus the potential of grazing management practices to degrade, maintain, or enhance environmental quality.

- To utilize the experimental watersheds as a demonstration site for holding field days and short courses to educate ranchers, fisheries associations, regulatory personnel, etc. about watershed function, grazing best management practices, monitoring, etc.
- To complete a calibration period and develop a significant calibration response relationship between treatment and control watersheds for hydrologic, ecological, and soil parameters.
- To implement grazing best management practice treatments and monitor parameters on the control and treatment watersheds.
- To report research findings in the form of a series of technical fact sheets, field days and professional journals for Extension clientele and the scientific community.

□ **Environmental and Management Factors Affecting Stream Temperatures in Mendocino County Rangeland Streams** is part of another research collaboration with Ken Tate and PhD. candidate Linda Vance from UC Davis. Water temperature is a critical property of rivers and streams, influencing a number of other physical and chemical characteristics. It also has strong impacts on freshwater vertebrates and invertebrates, influencing distribution, growth, reproduction, disease, migration and behavior. It is one of the suspected causes of the decline of the cold water fisheries species Coho Salmon and Steelhead trout. Popular opinion assumes that livestock grazing in riparian zones has a negative impact on water temperature, even though there is little research-based knowledge to support that belief, particularly in California.

The objectives of this research are:

- To assess the relative significance of physical factors affecting water temperature in North California rangeland rivers and streams.
- To determine the impact of livestock production practices on water temperature in those streams and rivers.

A stratified set of temperature data was collected last summer on both a continuously grazed site and a livestock excluded site at the HREC in Parson's Creek which drains into the Russian River. Rangeland owners on the Garcia, Gualala, Navarro, Eel and Ten Mile Rivers have agreed to have us come in and set-up temperature monitoring. Fifty-three stowaway temperature dataloggers have been put out on private land this summer with training provided to landowners on location and operation.

☞ Regional Water Quality Board adopts resolution 97-114 supporting voluntary approach and UCCE Water Quality Planning Short Course.

☞ Local Farm Bureau receives national award for efforts in forming watershed agriculture landowner groups - efforts resulted from information provided in Rangeland Water Quality Program.

☞ Garcia Watershed Range and Agriculture Land owners vote to have UCCE determine monitoring methods for baseline and subsequent data for TMDL site specific sedimentation reduction plan.

## Forest & Wildlands Management

□ **Caspar Creek Watershed Conference:** Held in May, this conference was cosponsored by the Cooperative Extension office, California Department of Forestry and the US Forest Service. Over **400** people from as far away as New Zealand and all along the western coastal states were presented current information on hydrology, biology, stream morphology, and erosion considerations. This conference was the largest forestry educational event of the year held in the Pacific Northwest.

□ **Mendocino Forest Council:** Forest Advisor Giusti manages and provides administrative support to the Forest Council, a standing committee of the Board of Supervisors. The Council has completed reviews of both Louisiana-Pacific and Georgia-Pacific Sustained Yield Plans (SYP) and continues to advise the Board of Supervisors on forestry issues and provide a valuable forum for community input into the management of industrial forest lands.

□ **Jackson Demonstration State Forest Advisory Committee:** This newly formed committee is charged with developing a new 10-year forest management plan for this forest of 50,000 acres. Forest Advisor Giusti is currently chairing a riparian subcommittee attempting to implement protective measures that allow timber harvest while still providing for all riparian values. Other issues addressed include: forest herbicide use, exotic weed control measures, silviculture, road management, recreation management, and the management of the Mendocino Woodlands

□ **Forest Landowners Workshop in Willits:** A two-day forest landowner workshop provided 40 landowners with information on tools and alternatives to forest management, planning and marketing. Presentations were made by fire fighters, mill operators, foresters, landowners and agency personnel. The field trip portion of the event focused on management scenarios and options when considering fire and fuels management, timber marketing, timber management, and forest planning.

□ **Estate Planning Workshop for Family Forestlands, Ukiah:** Participants were provided with information related to forest management, estate planning, inheritance taxation and tax planning. Topics included: 1) Forest Management Plans and Your Estate, Estate Planning and Available Tools, Valuation Issues, and Conservation Easements. Over 120 people attended the two workshops.

□ **Road Construction and Maintenance Workshop, UC HREC:** Roads are recognized as the most intrusive form of activity that occurs in forests. Road construction and maintenance is often cited as a major cause of forest erosion, water quality impacts and fire. The event was held at the UC Hopland Research and Extension Center. The program included representatives from the USDA-Natural Resources Conservation Service, California Department of Forestry, a private operator and UCCE Hopland personnel. Topics included soil structure and identification, culvert placement, road grading, grading techniques and timing. Forty operators, landowners and timber company employees attended.

## Integrated Hardwood Management Program

Recently, urban neighbors, environmentalists, and government agencies concerned about conserving oak woodland resources have criticized California vineyard owners for removing oak trees, habitat fragmentation, soil erosion, and negatively impacting streams.

□ To help grape growers prevent unnecessary damage to these natural resources, A dina Merenlender and Julia Crawford wrote **Vineyards in an Oak Landscape: Exploring the physical, biological, and social benefits of maintaining and restoring native vegetation in and around the vineyard.** This is a colorful 15-page brochure designed for grape growers with vineyards next to woodlands, landowners considering vineyard development, and those generally interested in agriculture and natural resource issues. It emphasizes the unique values of oak woodlands in California, the threats facing oak woodlands from agricultural expansion, and how to conserve natural resources in and around the vineyard. Specifically, this publication provides practical land management information for grape growers on why and how to conserve biodiversity, protect oak trees, prevent vine diseases transmitted from native vegetation, erosion control, mitigate environmental damage, protect riparian and wetland areas, and support wildlife. Much of the material included in this publication was developed at a workshop held at the Fetzer Winery in Hopland.

□ A dina Merenlender, Greg Giusti, and Rick Standiford organized a working group consisting of industry biologists, regulatory agency biologists, and members of the environmental community who met regularly to formulate hardwood retention guidelines for the north coast. The purpose of this committee was to recommend interim retention guidelines for timberland in north coast forest types based on the existing data and to help identify specific knowledge gaps for better management practices in the future. The committee addressed: 1) the widespread conversion from conifer dominated habitat to a dominance of hardwoods as a result of historical timber removal practices; 2) the primary habitat types that would most benefit from retention guidelines in northern Sonoma, Mendocino, south west Trinity, and southern Humboldt Counties; 3) the criteria that should be

considered when selecting hardwood retention objectives; and 4) recommended retention guidelines for hardwood species in the selected habitat types. Together they compiled a set of interim retention guidelines for hardwoods in north coast forest types based on knowledge from the committee and relevant literature.

## Viticulture and Plant Science

### Research

- ❑ **Mediterranean Wine Grape Cultivar Trial:** Viticulture and Plant Science Advisor, Glenn McGourty's trial of 20 different Mediterranean Wine Grape Cultivars is now in its fifth season. Last fall, the first harvest of grapes were crushed for wine from the cultivars Grenache, Syrah, Sangiovese, Mourvedre, Fiano, Covina, Pinot Gris, Marsanne, Rousanne, and Viognier. These varieties may expand the market for Mendocino County growers bringing additional profits and recognition.
- ❑ **Husch-LaRibera Rootstock Trial:** In an effort to continually research the most viable and disease-resistant rootstock for our growing area, Advisor McGourty is conducting a research trial with the cooperation of Husch-LaRibera Vineyard.
- ❑ **Roederer Estates Pinot Noir and Chardonnay Field Trial:** Recognizing the adaptability of these varieties to Mendocino County climate, Glenn McGourty has started a field test at Roederer Estates.
- ❑ **Electronic Weather Monitoring for Prediction of Vineyard and Orchard Pests and Diseases** Using grants from the UC Statewide Integrated Pest Management (IPM) project, research weather stations were set up to monitor field conditions every 15 minutes and to make computer model generated predictions about potential disease infections of wine grapes and pears. This effort will help growers move away from calendar spraying programs to ones that are based on knowing exactly when a pest or disease will occur. This will save growers money and minimize the use of pesticides helping both the economy and the environment.

## Educational Programs

- ❑ **Pinot Noir Conference:** Held in May and attended by over 100 people, the objective of this conference was to inform growers and wine professionals of the latest views on terroir, clones, viticultural practices, and wine-making styles that give wines from different production areas their regional distinction. The outlook for market conditions of wine and wine grapes were also discussed.
- ❑ **Lake & Mendocino Counties Winegrape Marketing Seminar:** Over 80 people attended this seminar sponsored jointly by UC Cooperative Extension, the Lake County Winegrape Commission, and the Mendocino Winegrowers Alliance. Speakers from throughout the industry shared the latest trends in consumption, production, new market opportunities, and research.
- ❑ **Grapevine Canopy Management Seminar:** By lecture and field demonstration, area wine grape growers were taught the theory and practice of grapevine canopy management to increase the yield and minimize disease.
- ❑ **Area-wide Codling Moth Project Field Day:** Pomology Advisor, Rachel Elkins, and North Coast Area IPM Advisor, Lucia Varela, held a research update for local pear growers discussing the Codling Moth Mating Disruption Project, Codling Moth Sanitation, and the Mendocino Fireblight and Pear Scab Projects. Local growers are continually updated throughout the year on pear research progress.

## Joint Tourism and Agricultural Marketing Promotional Study

This cooperative study funded by the a grant from the USDA / Forest Service shows that Mendocino County's economy is in transition. Traditional employment in timber, fishing and ranching is on the decline, but food and beverage products and tourism is growing. The Mendocino County Promotional Alliance was formed to provide promotional activities for the County as a result of this study. This alliance should result in increased TOT (bed tax) funds and jobs for Mendocino County.