

California Association of Winegrape Growers Vineyards and Wildlife Habitat

ACTION PLAN

Introduction

In December 2000, the California Association of Winegrape Growers (CAWG) hosted a diverse group of agricultural producers, conservationists, agency officials and grower organizations for a roundtable discussion on vineyards and wildlife habitat. This discussion focused on existing knowledge about the interaction between vineyards and wildlife, and also helped to identify gaps in this knowledge. While participants acknowledged significant common ground on many issues, they also recognized the need for a more formalized inventory of existing, ongoing and needed research. At the same time, participants realized that a number of on-farm projects and group efforts are effectively addressing habitat concerns. Ultimately, participants expressed support for educational efforts and increased research.

On February 15, 2002, CAWG convened the “Vineyards and Wildlife Habitat Workshop” at the University of California, Davis. More than 130 growers, agency officials, academicians and conservationists participated in facilitated panel discussions organized around four ecosystems (see Appendix 1 for a workshops summary).

In April 2002, CAWG’s Vineyard and Wildlife Habitat Project Steering Committee (see Appendix 3) reviewed the issues identified by workshop speakers and participants. The following action plan represents a synthesis and prioritization of these issues.

POLICY GOALS

- Goal 1: Increase the incentives available to growers to improve stewardship and enhance wildlife habitat.**

- Goal 2: Provide more support for landscape-level, integrated approaches to research, extension and land management.**

RESEARCH GOALS

- Goal 1: Develop pilot projects with existing producers to evaluate management practices over several years.**

- Goal 2: Research wildlife use of vineyards under varying development and management strategies.**

- Goal 3: Develop accepted indicators of ecosystem health and function.**

- Goal 4: Develop better tools for monitoring the outcomes (both economic and ecological) of various stewardship practices.**

- Goal 5:** Develop guidelines regarding the appropriate size and management of buffer areas.
- Goal 6:** Support research that suggests adjustments in existing production systems that will benefit wildlife.
- Goal 7:** Identify key regional flora and fauna that need to be addressed in the context of vineyard development and management.

OUTREACH, EDUCATION AND COLLABORATION GOALS

- Goal 1:** Publish workbook for growers that provides examples of successful vineyard management and development practices as well as sources of financial, technical and regulatory assistance.
- Goal 2:** Provide information to growers regarding Safe Harbor Agreements.
- Goal 3:** Support pilot projects that demonstrate the effectiveness of stewardship incentives.
- Goal 4:** Increase collaboration between growers and researchers.
- Goal 5:** Improve the extension of existing research and information to growers.
- Goal 6:** Develop a vineyard development checklist and list of resources for assistance.
- Goal 7:** Encourage participation in local watershed groups.
- Goal 8:** Provide information to growers regarding watershed function.
- Goal 9:** Work with other segments of the agricultural community to increase awareness of wildlife habitat needs and stewardship opportunities.

ACTIONS

- Action 1:** Pilot Project – outreach, funding, etc.
- Action 2:** Catalog and tap into existing efforts to address stewardship (including Mondavi, Lower Mokelumne River, Pest Management Alliance)
- Action 3:** Meet with researchers to discuss research needs
- Action 4:** Meet with scientific journals to encourage publication of applied research focusing on vineyards and wildlife habitat

Appendix 1: Workshop Notes

The California Association of Winegrape Growers hosted a one-day workshop on Vineyards and Wildlife Habitat at the University of California, Davis, on February 15, 2002. More than 130 growers, agency officials, academicians and conservationists attended. Introductory remarks were provided by:

- Karen Ross, President
California Association of Winegrape Growers
- Michael Spear, Deputy Secretary for Land Conservation and Stewardship
California Resources Agency
- Michael Bean
Environmental Defense
- Kevin Merrill
Central Coast Winegrowers

Dr. Adina Merenlender of the University of California Integrated Hardwood Range Management Program provided an overview of current research on vineyards and wildlife. Following this introductory session, workshop participants selected from the following four panel discussions:

- Grasslands and Vernal Pools
- Oak Woodlands
- Valley Floor Habitats
- Riparian and Riverine Habitats

Following each panel discussion, audience members were asked to brainstorm ideas regarding research needs, barriers to increased cooperation and research, and opportunities for improved communication and collaboration. While each discussion session proceeded in its own manner, the comments recorded provide guidance for future research and education efforts. The following is a summary of the feedback provided during these panel sessions.

Grasslands and Vernal Pools

Moderator: Robert LaVine, Robert Mondavi Winery

Panelists: Michael Barbour, Professor of Botany, University of California, Davis
Brad Lange, Lange Twins, Inc.
Chris Unkel, The Nature Conservancy

Barriers to Increased Collaboration and Research

- The regulatory maze creates a lack of continuity. With uncertainty comes a lack of flexibility in management (for example, grazing is prohibited) and regulatory implementation.
- Does the Safe Harbor program really provide protection once science and mitigation is in place?

- Protection of Neighboring Land – adaptive management techniques on preserves are needed to protect both adjacent farmland and wildlife
- The “sins of the past” are used against farmers. Farmers have a fear of having to address land use practices of 70 years ago.
- Lack of mutual respect and understanding
- Access to vernal pools for research
- Lack of knowledge regarding the location of vernal pools
- Lack of definition for successful mitigation

Management Needs

- Large blocks of vernal pools
- Protection of hydrologic features and water quality
- Knowledge of how we protect the geology of soils
- Farming methods that do not disturb soil topography
- Invasive plant management
- Connectivity of vernal pool habitats
- What is an appropriate buffer?
- What actions can be taken within a buffer zone?
- Success stories regarding Safe Harbor agreements
- A “unified field theory” regarding what constitutes a vernal pool

Knowledge Gaps

- Wildlife and vernal pools
- Protocols for mitigating impacts to vernal pools
- Opportunities for farmers and biologists to work together on research, surveys, and monitoring
- Baseline data regarding vernal pools
- Better understanding of the risks associated with certain actions in vernal pool habitats
- Impacts to dry, open grasslands (non-vernal pool grasslands)
- Historical perspectives on vernal pools, using Native American languages to provide information
- Landscape history
- Continuity of messages about managing vernal pools
- Application of new data, knowledge and regulations in both new and existing vineyards
- Incentives for good stewardship
- Ways to address existing vineyards that may be too close to riparian areas
- Farm Bill Conservation Title – assistance for on-farm stewardship and farmland preservation
- Increased funding for extension and the Natural Resources Conservation Service
- Growers need to be engaged with agencies that can provide assistance
- Regional approaches

Research Needs

- More trained taxonomists
- Information on populations and distribution of vernal pool species
- More biological information regarding farming
- Information on bird populations
- Local (California) information

- What types of financial incentives make a difference?
- Cost sharing programs for research
- Proactive conservation input from all levels, especially from farmers
- Voluntary partnerships – researchers need to prove to farmers that we can trust one another

Oak Woodlands

Moderator: Bill Tietje, UC Cooperative Extension

Panelists: Dr. Adina Merenlender, UC Integrated Hardwood Range Mgmt. Program

Greg Guisti, UC Cooperative Extension

Pete Opatz, Clos Du Bois Winery

Tom Gaman, California Oak Foundation

Research and Management Questions

- What are the ecological impacts of rangeland conversion to vineyards?
- Is rangeland a habitat type?
- Constrain vineyards within existing agriculture footprint – avoid deforestation
- Look for opportunities to enhance structure of oak woodlands
- Land use “typing” does not say anything about ecological value
- Vineyard development and management practices make a huge impact on oak woodlands
- How can the value of agriculture ecosystem functions be compared with natural ecosystem functions?
- How close should we look at these issues (e.g., landscape level versus individual species)?
- The perception is that change is negative, but it really depends on how you use the site.
- There are positive changes, but there are others where it is a continuous battle between nature and profitability.
- The economic needs of farmers need to be addressed.
- Farmers should be paid for public benefits.
- Lack of financial incentives to farmers will result in development of land.
- How is the value of an oak woodland on vineyard land established?
- Bankers and estate planners need to be educated about ecological values
- If oak woodlands are not preserved now there will be a larger future cost via regulations
- Growers who serve as models to other growers need to be greatly publicized.
- Watershed groups can play an important role
- Cookbook instructions do not work –solutions need to be property specific
- We need to look at unsuccessful oak regeneration projects (as well as successful ones)
- Long-term stewardship practices that promote natural oak regeneration need to be implemented (including prescribed burning and grazing)
- Information needs to be consolidated
- There is often conflicting “expert” information
- How do growers know when their practices are beneficial?
- Who do growers go to for correct information when they hear conflicting information?
- Local expertise should be sought (and cultivated)
- How can management practices mimic natural functions in oak woodlands?
- We do not want to see compensation for forestland losses
- How can vineyards and oaks occupy the same habitats without hindering each other?

- What kinds of carbon sequestration benefits do oak woodlands and vineyards provide?
- Habitat enhancement may attract detrimental species (like sharpshooters and blackberries)
- Growers can provide habitat for predators of pest species – Sonoma State is an example
- Barn owls eat many rodents – may assist in oak regeneration – Cornell has great instructions on installing boxes
- We need guidelines specific for California for owl boxes and bat boxes.
- Sudden Oak Death information can be found at www.suddenoakdeath.org
- Information on conservation easements needs to be readily available
- What incentives exist for growers who implement practices to preserve oak woodlands?
- Wildlife corridors need to be explored

Valley Floor Habitats

Moderator: John McCaull, American Farmland Trust

Panelists: Robert Bugg, UC Sustainable Agriculture Research and Education Program
Mike Fris, US Fish and Wildlife Service
Jon Holmquist, Canandaigua Wine
Dr. John Hopkins, Institute for Ecological Health

Research and Management Needs

- What is the impact of vineyards on grasslands/annual grasslands
- Can vineyards have a positive impact in wildlife? If so, which species benefit?
- What are the benefits of appropriate hillside vineyard development on environmental resources such as wildlife and water?
- How effective are created mitigation habitats?
- What are the benefits of conservation easements?
- More detail is needed on the ecological importance of valley lands
- How can we access programs and funding? How do we stretch agriculture dollars to benefit more landowners?
- Do experienced people have better ideas to get agriculture dollars? How do we generate more money for agriculture programs?
- There needs to be more education of the benefits of sustainable agriculture
- We need better information on the benefits of sustainable agriculture practices
- There is a need for more information to be gathered
- More species need to be surveyed
- Grower education regarding the benefits of planned buffers and vineyard margins needs to be emphasized
- How can agencies be more integrated so that they are on the same page and offer non-conflicting information?
- Education and information needs to be more effectively disseminated to farmers
- We need more funding to promote additional research studies and programs
- How can access be improved to the farming community so relationships and trust can be developed?
- Both State and Federal Safe Harbor processes need to be simplified
- There needs to be more education regarding habitat benefits
- Studies of habitat systems need to be done
- Agro systems (vineyards) and their impacts to adjacent habitats need to be studied

- Long-term changes in land uses need to be studied
- The cost-benefit ration of habitat improvements needs to be evaluated

Riparian and Riverine Habitats

Moderator: Kent Reeves, East Bay Municipal Utility District

Panelists: Lisa Thompson, Wildlife, Fish & Conservation Biology Dept., UC Davis

David Lewis, UC Cooperative Extension

Geoff Geupel, Point Reyes Bird Observatory

Tish Ward, Atwood Ranch & Southern Sonoma County Resource Conservation District

Ellie Insley, Ellie Insley and Associates

Concerns and Needs

- Soil erosion
- Challenge of working together (bringing together landowners)
- Water quality / biofilters
- Run-off due to roads
- A better definition of aesthetics
- Groundwater recharge
- Re-establishing native species (plant and animal)
- Relationships with agencies / lack of communication
- Protection and enhancement of species
- Continuing research
- Wildlife and bird habitat protection
- Trust / private property rights / communication / getting that warm fuzzy feeling / reducing fears of landowners
- Pierce's Disease
- Water availability and water rights
- Funding for restoration
- Establishing the economic value of a healthy riparian system
- Long-term monitoring and evaluation to insure success
- Edge reduction: the richest part of the system is being lost
- Erosion control
- Conservation easements, contiguous protection
- Grower education
- Pesticides (reducing the use of chemicals)
- Sediment Total Maximum Daily Load (TMDL) regulations
- Stream flow
- Flood control
- Financial assistance and incentives
- Buffer strips
- Migration corridors
- Technical support
- Relief from regulatory pressure
- Economic impacts
- Non-native species invasion
- Wildlife use of corridors

- Watershed management
- Riparian buffers
- Flooding
- Availability of information to growers
- Dissemination of information to growers
- Spreading the word of successful farming practices to other farmers as well as the agency and conservation community.
- More research
- Baseline information is needed
- Cost-sharing
- Understand landowner's needs
- A one stop shop of agencies and services
- Tell your story
- Improve public perception
- Get grower "buy-in" to BMP's
- Use public good-will...educate school kids
- Use nursery growers to propagate native plant species
- Use natural mulch around re-vegetation projects
- Connectivity
- Misperception of what is good for the environment is not good for the grower.
- Lack of trust of the government and science
- Education of riparian function
- Beneficial insects
- Positive reinforcement
- Department of Fish and Game safe harbor for state listed species
- Navigating the regulatory framework
- Farmer participation on restoration projects
- Educating the public of the importance of on-farm habitats
- How big is big enough for buffer zones
- Aquatic habitat
- Reduction of disease vectors
- Pest control

Following the panel discussions, Dr. Jeff Dlott of Real Toolbox, Inc. provided a synthesis of the day's discussions. According to Dr. Dlott, we need improved trust to move forward toward healthy wildlife habitats and healthy vineyards.

Difficult issues included:

- Introductions of new plants
- The economic realities of growing grapes
- The appropriate use and size of buffers
- Building trust
- Wildlife habitat restoration on existing vineyards
- Forming new partnerships
- Conducting research that is meaningful locally

However, Dr. Dlott also suggested that workshop participants shared common ground on the following issues:

- The need for regulatory “one-stop shopping”
- Improved monitoring and collection of baseline data
- Improved cooperation from all sides – all parties involved need to reach a comfort level with each other

Dr. Dlott indicated that participants agreed that there was not a great deal of disagreement regarding population pressures and the globalization of the agricultural economy. He also suggested that workshop participants shared many of the same objectives, the most common being the conservation of natural resources. More open communication, he felt, is needed to improve understanding. Furthermore, similar discussions need to happen locally, and funding opportunities should be better coordinated.

Appendix 2: California Association of Winegrape Growers

Founded in 1974, the California Association of Winegrape Growers (CAWG) is dedicated to enhancing the business of growing winegrapes through research, advocacy and industry leadership. CAWG represents growers of more than 50 percent of the gross grape tonnage crushed for wine and concentrate in California.

Grapes are consistently one of the four most valuable commodities produced in California. Many agricultural landowners who wish to remain in agriculture convert some of their land to vineyards to enhance their profitability. Like all agricultural production, vineyard management and development practices are variable. Some practices support or enhance wildlife habitat, while other practices may be neutral or harmful. This project will identify current knowledge about the interaction between vineyards and wildlife habitat, prioritize future research needs, and provide case studies of successful practices.

Appendix 3: Steering Committee