

Monitoring Values and Practices of Oak Woodland Decision Makers on the Urban Fringe¹

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Abstract: Concern over oak woodlands has shifted away from ranch management towards residential areas. This shift has been accompanied by the involvement of decision makers who previously had little involvement with rangeland policies and practices. A survey of three recent Cooperative Extension workshops illustrates a number of important patterns regarding interest and activities of small landowners, landscape professionals, local government employees and concerned neighbors. The process of addressing these potential decision makers through existing professional or issue based interest groups offers significant efficiencies regarding communication and monitoring strategies.

Over the past two decades concerns over oak woodlands have changed dramatically. Previously, activities which led to the removal of large numbers of oaks were related to subsidies for range improvement or large scale firewood harvesting. Now they are more often related to new housing developments, expansion of existing buildings and the overall impact of urbanization. At the city and county level this has led to ordinances and requirements which typically focus on specific cases of tree removal and attempts to trade a certain number of new saplings for each tree removed. Few if any of the measures deal with more difficult issues such as wildlife habitats or how to ensure that there will be a next generation of the existing plant species.

One major consequence of this shift in concern from ranch management to a more 'open space' perception of the land is the involvement of a new set of decision makers. When framed in the context of a rural resource, groups concerned with oak woodlands were mainly large landowners, state or federal agencies, and statewide environmental groups (Ewing 1990). When framed in the context of a suburban resource, a new set of profession- or issue- based interest groups enter. Landscape professionals such as arborists, gardeners, and landscape architects, local planners, concerned neighbors and local environmental groups are increasingly involved with new projects and local debates over development and ordinances. Although considerable research has been done on the views and practices of landowners (Huntsinger and Fortmann 1990, LeBlanc and others 1989) there is much less information on more "suburban" interest groups. Existing patterns and experiences with local ordinances and policies (Doak and others 1988), surveys of county planners (Pillsbury and Oxford 1987), Realtors (Dia-

mond and others 1987), and initial recipients of Cooperative Extension oak woodland management literature (Easton 1987) provide insights into some but not all of these groups.

Whatever the state policies regarding oak woodlands will be, most actions will be taken by private landowners, often assisted by consultants. Local government officials will be involved in the planning and approval processes for some of these actions. Given the inherent difficulties of predicting the future on existing geographic and demographic patterns of change, a more effective strategy could be to focus on the decision makers themselves. One lens with which we can reduce the heterogeneity is through existing profession- and issue-based interest groups.

This paper reports on how monitoring and communicating through interest groups could offer significant economies and more importantly could promote more effective working arrangements for discussing new problems, information and strategies.

NEW APPROACHES OF IHRMP EXTENSION PROGRAMS

Since 1986, the University of California Cooperative Extension and the California Department of Forestry and Fire Protection's have jointly funded the Integrated Hardwood Range Management Program. Research, extension, and monitoring activities were initiated to accomplish the goals set out in the 1986 policy statement of the California State Board of Forestry. In the last few years the Program has broadened from its initial focus on large landowners and resource professionals to include other groups such as small landowners, local planners, schools, and conservation organizations.

An example of this more inclusive approach was a series of three workshops organized by regional hardwood specialists of the University of California Cooperative Extension in the spring of 1990. Workshops were held in San Luis Obispo, Sonoma and Tuolumne counties and attracted 400 participants from more than thirty counties. Participants included small landowners, arborists, landscape architects, local planners and concerned neighbors. During the workshop, participants responded to a survey which dealt with their values, problems and practices regarding oak woodlands.

To reduce the number of potential categories, participants were grouped according to what they felt was their main reason for attending the workshop—landowner, consultant, government employee or concerned neighbor. Even though the sample

¹Presented at the Symposium on Oak Woodlands and Hardwood Rangeland Management, October 31 - November 2, 1990, Davis, California.

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was biased by requiring individuals to attend the workshop to become part of the survey, it provided a professionally and geographically diverse sample of individuals who are interested in oak woodlands and most probably will be involved in future decisions. Table 1 categorizes the participants in terms of their self-defined major interest in the workshop.

Most landowners at the workshops owned 10 acre or smaller parcels. Few large landowners or land developers attended the workshops. Consultants were predominantly land-

scape architects in San Luis Obispo, arborists and professional gardeners in Sonoma, and professional gardeners and developers in Tuolumne. Government employees were roughly half planners and half technical staff from parks, roads or planning departments. "Neighbor" was a catch all term which included members of conservation organizations, college educators, retired individuals and other members of the public.

Table 1—Participants at three regional IHRMP workshops

Workshop	Total	Surveyed	Self- defined major reason for attending			
			Landowner	Consult.	Govt.	Neigh.
			pct	pct	pct	pct
San Luis Obispo	90	56	12	50	34	4
Sonoma	240	147	11	41	29	19
Tuolumne	80	65	18	31	39	12
Total Percent			12	40	32	16

Note: Total—estimated total participants Surveyed—number of returned surveys pct—percent of surveys from each self defined group at different workshops.

VALUES, PERCEIVED PROBLEMS AND PRACTICES

If we want to have a more realistic handle on how to provide assistance to these new oak woodland "managers" or decision makers, we need to ask some basic questions about how they relate to the land. The most basic question is why do these people value oak woodlands? There was a surprising degree of consistency across all groups. Figure 1 illustrates the relative ranking of important values with equal weight given to each workshop.

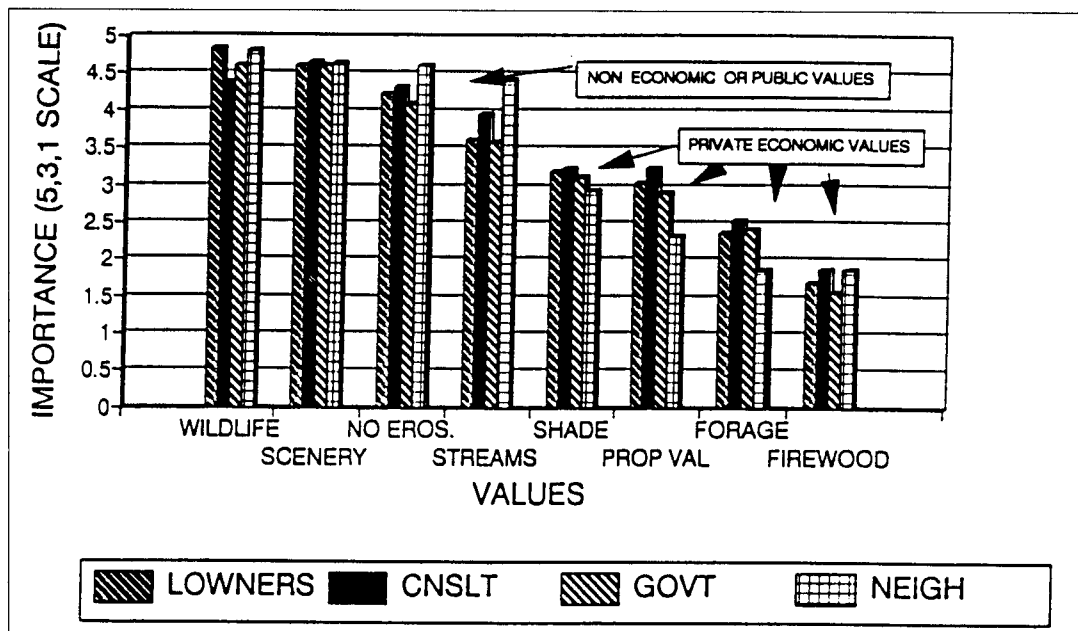


Figure 1—Oak woodland values—a summary of three workshops.

Legend

IMPORTANCE WEIGHTING

5—"very important"

3—"fairly important"

1—"not too important"

VALUES

Wildlife wildlife habitats

Scenery scenic beauty

No eros. prevent soil erosion

Streams preserve quality of riparian corridors

Shade shade for people and animals

Prop val Increased property value associated with oaks

Forage Improved forage underneath oaks

Firewood source of firewood

A general distinction can be made between two types of values—public and private. The high value placed on wildlife habitat and scenic beauty as well as the strong concern to protect against degradation of soil and stream resources all represent a concern for good land stewardship and protection of the natural qualities of the land. The values we conventionally associate with management—making income off the land by either increasing the real estate value or annual cash flow—are given significantly less credence.

Though there is general agreement on values there is less agreement on what problems exist and how serious they are. As with values, the pattern of responses was relatively similar across all three regions (figure 2). The loss of oak woodlands to large scale development projects was the first or second concern for nearly all groups. Problems commonly associated with "bad" ranch management — damage to riparian areas, excessive firewood harvesting, and over grazing—were considered to be relatively minor problems by all groups. For nearly all other topics, small landowners had significantly different perceptions than consultants, government employees, and neighbors. Except for diseases, small landowners generally reported lower levels of problems. Other groups concentrated on problems related to individual trees rather than habitats or larger groups or populations of trees. Although blue and valley oak have the least regeneration and highest percentage of older trees among all the major species in California (Muick and Bartolome 1987), there was no statistical difference between the participants who had blue or valley oak on their parcels of interest (N=171) and those who did not (N=126) in terms of regeneration, planted acorn survival, diseases or loss of stately trees.

The most significant difference between groups and regions concerned recommended practices (figures 3 through 5). Saving individual living trees was suggested by more than 80% of most groups. Although nearly all groups felt wildlife habitat was the most important value of oak woodlands, they were usually not able to translate this into concrete actions. For only two groups—landowners in San Luis Obispo and government officials in Tuolumne—did retaining corridors or groves during any clearance operation garner a significant majority. Likewise, saving snag and cavity trees, some of the most important habitat niches within the oak woodlands, was rarely mentioned by a majority of any geographic or interest group. Finally, the preparation of land management plans was not a familiar or widely practiced approach among this sample.

COMMUNICATION NETWORKS

One inference from their responses is that decision makers on the urban fringe often do not have sufficient awareness of planning or management techniques to effectively address the problems they see. An aim of extension is to provide information so individuals can more effectively achieve their goals. This aim is easy to achieve with full time farmers and ranchers who will most likely be farming and ranching during the next few years. It is more difficult to do when dealing with much diverse populations, who may or may not be making significant deci-

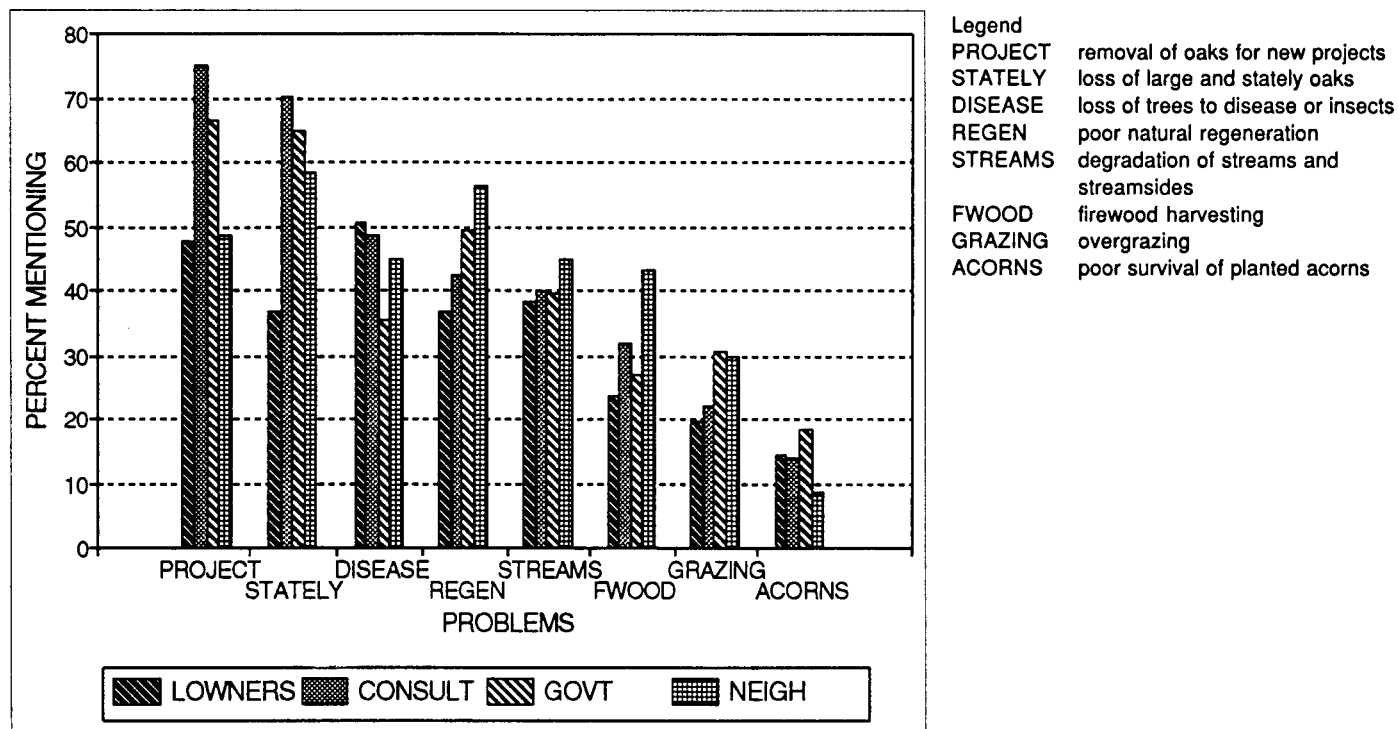
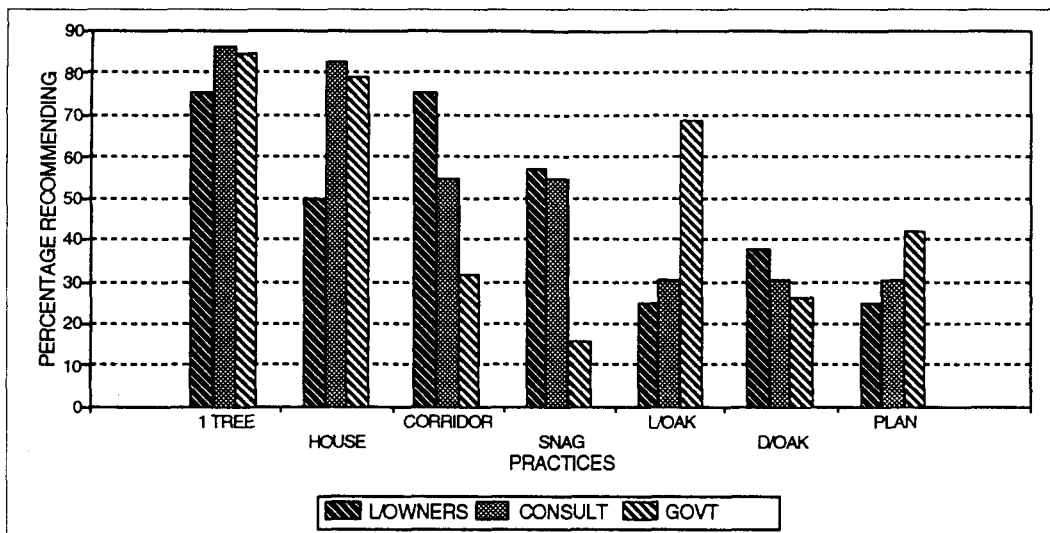


Figure 2—Problems with oak woodlands - a summary of three workshops.



Legend

1 TREE save one tree

HOUSE alter plans for new house or road to preserve trees

CORRIDOR leave corridors or groves if thinning oaks

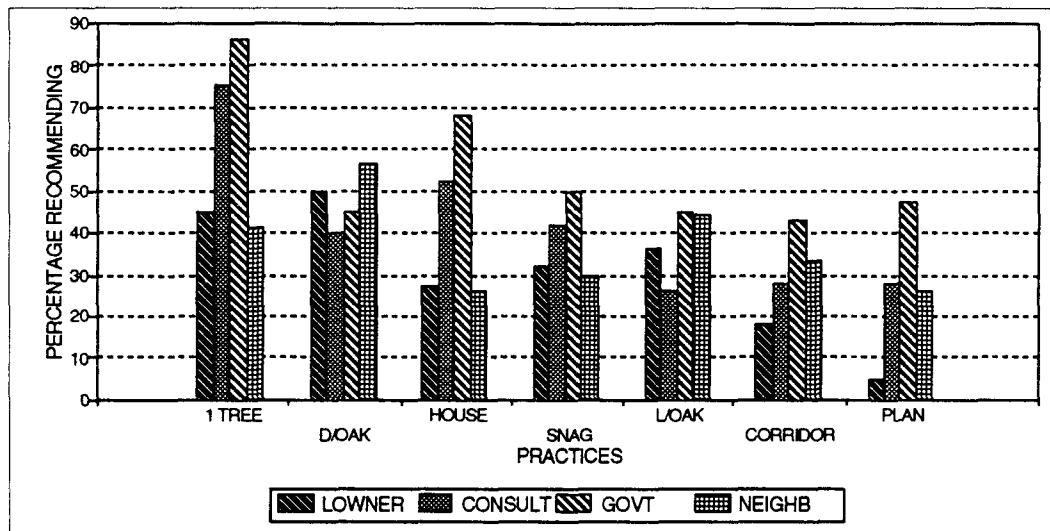
SNAG leave snag and cavity trees

L/OAK plant live oaks

D/OAK plant valley or blue oaks

PLAN have a land management plan prepared

Figure 3—Oak woodland practices as preferred by San Luis Obispo participants.



Legend

1 TREE save one tree

HOUSE alter plans for new house or road to preserve trees

CORRIDOR leave corridors or groves if thinning oaks

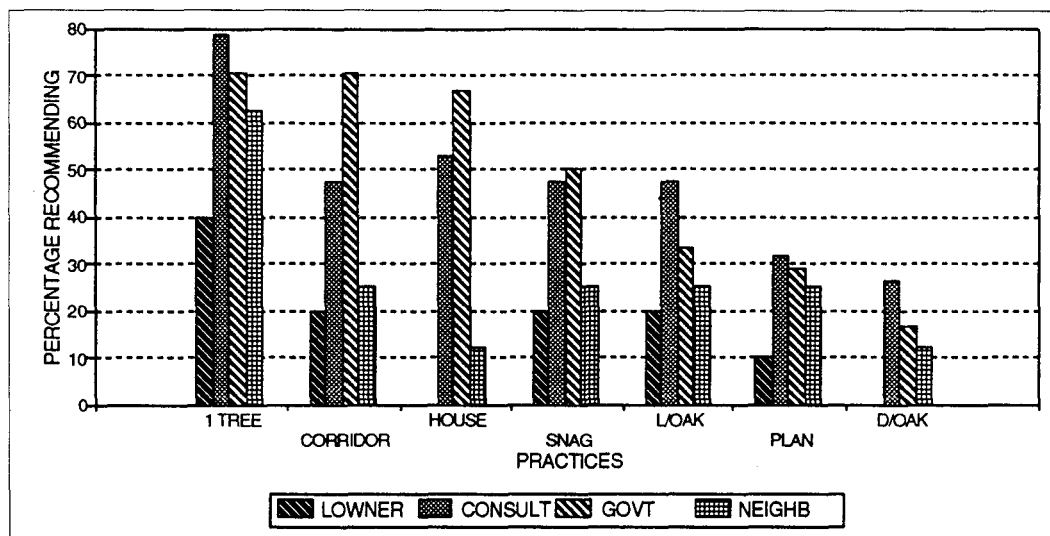
SNAG leave snag and cavity trees

L/OAK plant live oaks

D/OAK plant valley or blue oaks

PLAN have a land management plan prepared

Figure 4—Oak woodland practices as preferred by Santa Rosa participants.



Legend

1 TREE save one tree

HOUSE alter plans for new house or road to preserve trees

CORRIDOR leave corridors or groves if thinning oaks

SNAG leave snag and cavity trees

L/OAK plant live oaks

D/OAK plant valley or blue oaks

PLAN have a land management plan prepared

Figure 5—Oak woodland practices as preferred by Tuolumne participants.

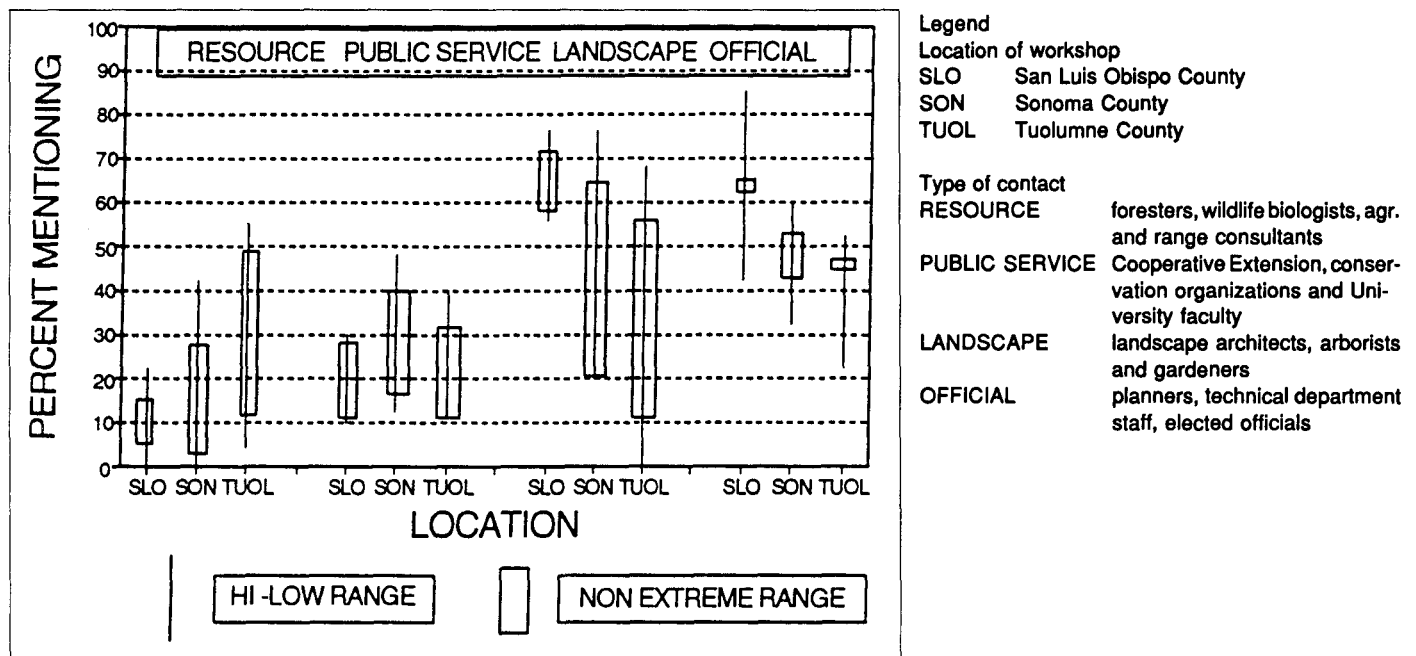


Figure 6—Oak management discussions by location and type of contact.

sions regarding oak woodlands over the next decade. To understand the broader communication networks within which this sample is connected they were asked a number of questions concerning who they talk to, what they read and what they see in the field regarding oak woodlands.

Discussions with other knowledgeable individuals is probably the most important source of new information for most of the participants. Figures 6 summarizes some of the communication patterns. The workshops in San Luis Obispo and Sonoma attracted participants from the widest number of counties and generally illustrated a stronger influence of urban and suburban related issues. The communication patterns of the Tuolumne participants, on the other hand, had more similarities to those reported in Huntsinger and Fortmann (1990) and LeBlanc and others (1989). Although the patterns vary considerably by location and profession, a number of general inferences can be drawn.

Contacts can be broken down into four general categories: (1) local officials—planning or technical department staff as well as elected officials; (2) landscape professionals—landscape architects, arborists, and gardeners; (3) "public service" professionals—Cooperative Extension, conservation organizations and University faculty and (4) resource professionals—foresters, wildlife biologists, agricultural consultants, and range consultants. Local government officials and landscape professionals are numerous in the absolute sense and were contacted by a high proportion of the participants. Cooperative Extension personnel and conservation organization representatives appear to be the most active networkers of information since representative of these relatively small groups were contacted by a significant number of the participants. State and Federal agency personnel as well as forestry or agricultural consultants were rarely contacted outside of Tuolumne sample. Although resource professionals should possess much of the technical

knowledge concerning wildlife habitats and vegetation dynamics they appear to be "out of the loop" for many land use decisions in or near suburban areas.

The most common approaches used by organizations to disseminate new information are publications, workshops and other types of meetings. Published information on oak woodland management is available from a number of sources. Table 2 illustrates the importance of different publications for information on oak woodland management. Since this series of workshops were sponsored by University of California Cooperative Extension it is not that surprising that their publications were the most widely read. This represents an enormous increase from 1985 when Cooperative Extension farm advisors were the least important source of oak related information (Huntsinger and Fortmann 1986). Professional journals represent an apparently under utilized channel for providing new information to professionals who may not normally receive Cooperative Extension literature.

Another important source of ideas concerning oak woodland management is actually seeing "good" examples. The percentage of participants who had seen good management ranged from 56 percent in Sonoma to 77 percent in Tuolumne. Approximately two thirds of those people were also able to

Table 2—Useful sources of new information regarding oak woodland management

Information Source	Percent of participants reading for oak information
Cooperative Extension publications	81
Agricultural or forestry journals	49
Gardening journals	43
US Forest Service publications	42
Other magazines	32
Newspapers	28

discuss management with the owner or land manager. When people can read about better oak woodland management in their own terminology and see it on the ground, we will be getting closer to more effective strategies for these fringe areas.

The wide variety of concerns of different interest and professional groups suggests that forums to discuss oak woodland management before serious conflicts arise would be useful. When asked to rank the usefulness of potential forums for discussing oak woodland related information and policies the participants felt Cooperative Extension would be the most useful and gave slightly lower ratings for professional associations, county agencies and state agencies.

PUBLIC POLICIES

The participants of these three workshops came because they feel there is a role for public involvement in oak woodland policy. What individuals consider to be appropriate involvement varies from the traditional provision of "extension messages" to more expansive, and expensive, approaches such as workshops, local or state regulation, subsidies and outright purchase of partial or full development rights. Although most policy discussions concerning public intervention have centered on regulation and at the State level through laws and the local level through zoning (Huntsinger and Bleier 1990), a number of recent initiatives concerning wildlands have man-

dated state purchase of all or some development rights for wetlands, parks, or wildlife habitats. In addition there has been discussion on whether a more proactive use of various state and federal subsidy programs could promote certain land management practices which would further generally agreed upon social goals. To get an initial idea of how much support exists for these approaches with respect to oak woodlands, participants were asked two simple yes/no questions: (1) did they approve the use of State funds for the purchase of development rights in ecologically sensitive oak woodland areas; and (2) would they support the use of landowner subsidies to promote land use practices beneficial to wildlife and scenic beauty? A surprisingly high rate of approval of these two issues was common to all groups (table 3).

Although the participants responded favorably to the use of state funds for oak woodlands, figure 7 illustrates a strong preference for a significant level of city or county involvement. Support for financially expensive state funded programs and the desire for local control (which usually consists of zoning and regulation) represent two very different and often conflicting types of government involvement.

Table 3 — Approval of state funds to protect unique oak woodland habitats

Workshop	Purchase Development Rights	Provide Subsidies for Habitat Preservation
San Luis Obispo	91 pct	87 pct
Sonoma	92 pct	84 pct
Tuolumne	91 pct	81 pct

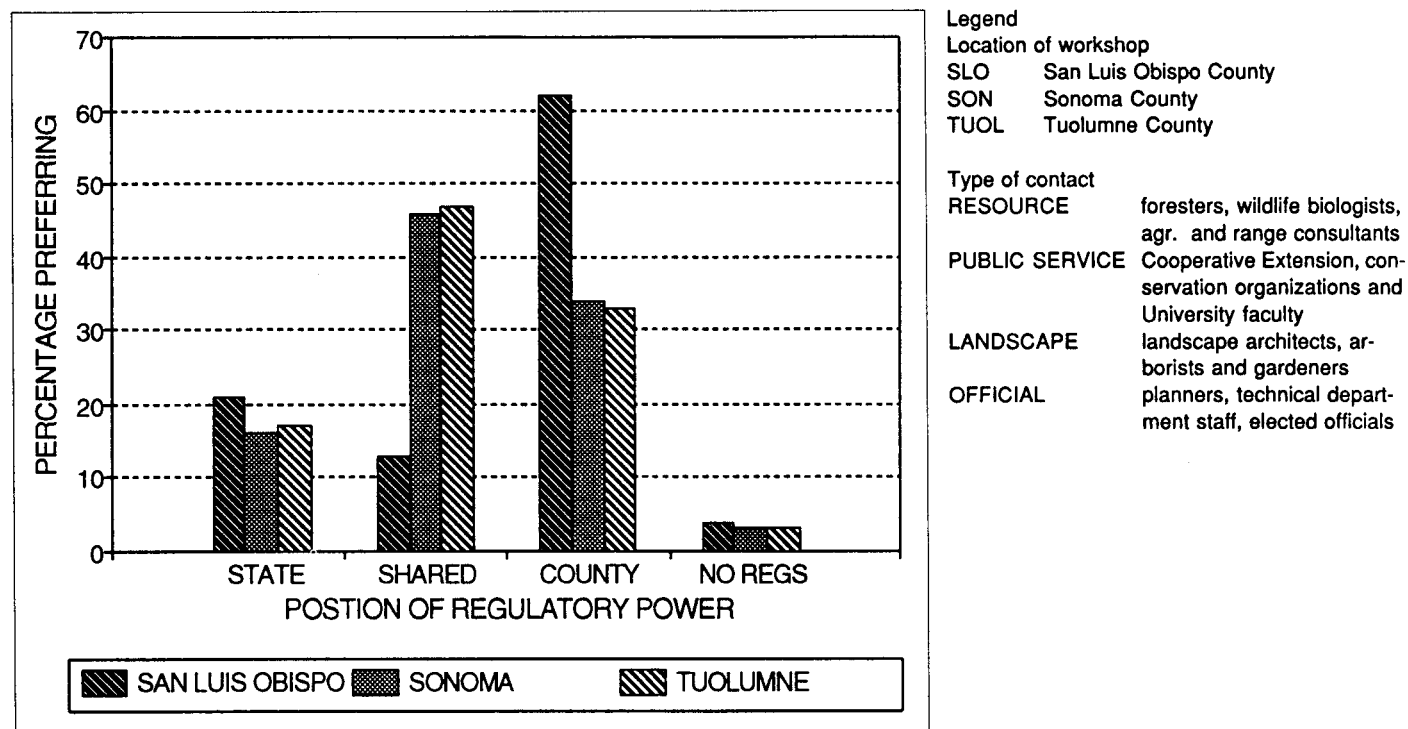


Figure 7—Regulatory power concerning oaks preferred by participants at regional workshops.

CONCLUSION

When serious discussions began at the state level concerning interventions on oak woodlands, the focus was oriented mainly towards ranch lands. Recent conflicts and ordinances have been localized and oriented towards residential areas (Doak and others 1988). A new set of professional and interest groups are being brought in who often have very different values and approaches. This requires that extension programs, such as the IHRMP of the University of California Cooperative Extension, use strategies which address both the physical problems and the decision makers who will be involved. Many of the actors influencing decisions regarding oak woodlands are not landowners and do not necessarily hold similar values to landowners, especially large landowners. Strategically, it could be much more effective to deal with these diverse actors through interest groups, be they professional or issue oriented. Interest groups have their own journals and newsletters, continually share ideas and experiences, and are easier to track.

These three workshops attracted a large number of non-landowners who previously had little involvement with Cooperative Extension or state agencies concerned with rural resources. The participants illustrated a strong underlying agreement on values of these lands, the use of government funds to further those values, and a significant degree of local government control. Preserving living individual trees was the most common practice suggested of the participants. It is mainly done with private funds but is also the underlying rationale for many local ordinances. While they strongly support the value of wildlife habitat, scenic beauty and riparian zones, these features do not directly provide income to landowners. Consequently, these are often considered as constraints rather than goals for income producing land managers. How programs to protect these "public values" which occur on private land could be paid for may become a major issue in upcoming years. In terms of preserving habitats or relatively rare tree species, planning appears to be rare which takes into account larger areas and younger trees.

Many of the technical programs and publications of the IHRMP focus on how to monitor and manage resources to achieve habitat and aesthetic goals within the economic limitations of the landowners. The challenging task facing Cooperative Extension and other concerned organizations is how to transmit the knowledge to the individuals who will be involved in the decision making process, both as landowners and non-landowners. Although traditional resource professionals have the strongest technical background regarding wildlife and vegetation management, they are often not involved in decision making on the urban fringe. If state or local policies to promote the shared values are to be effective, the multitude of decision makers must become better acquainted with the relevant information. Contacting and monitoring these decision makers through their respective professional or interest groups appears to be an effective strategy.

TOWARDS AN INTEREST GROUP BASED MONITORING AND EVALUATION SYSTEM

One purpose of this research was to better define the important actors at the urban interface. Residential expansion and rapidly changing land uses have significantly increased disagreements over oak woodland management in this area. Strategically it is efficient to deal with large number and diversity of potential actors through interest groups, be they professional or issue oriented. Interest groups have their own journals and newsletters, continually share ideas and experiences, and are easier to track.

We realized that if this sampling approach was to have any practical use, it must include rural interest groups and the approach used for all groups must be comparable. As a follow-up to this first set of surveys, we conducted a larger state wide survey which used random samples for a number of identifiable interest groups. The groups sampled included some of those identified in the first survey as well as the California Cattlemen's Association, range professionals, and consultants to large scale developers. Samples from the different interest groups were taken from the four areas—San Diego, the Central Coast, the San Joaquin Valley foothills and the northern Sacramento Valley foothills—to capture but not be overwhelmed by geographic variation.

Initial analysis shows very similar values across rural and urban groups. Natural beauty, habitat for all wildlife species, and protection from soil erosion were the most important values for all groups. Compared to people who went out of their way to spend a full work day at a Cooperative Extension workshop, the respondents mentioned relatively fewer problems and were less concerned with habitat loss to development. Ranchers focused on the loss of forage from tree and brush growth. Most other groups concentrated on the loss of individual trees, poor regeneration and overgrazing. All groups ranked planning and management techniques similarly but landowners practice techniques less often than professionals recommend them.

The purchase of development rights and the provision of subsidies for wildlife habitat improvement had considerably less support than it did among the sample which attended the three workshops. There was strong, across the board support for the provision of information and advice and, with the exception of ranchers, very strong support for more parks. When asked to respond as taxpayers, however, the respondents gave significant support only an income tax check off and special fees on new subdivisions. Regulation in terms of zoning, permits and ordinances was more widely supported. The percentage of ranchers willing to accept carefully crafted oak related ordinances was considerably higher than reported in Huntsinger and Fortmann (1986).

Compared to earlier surveys of landowners and other decision makers, there is considerably more communication about

oaks with government, consultants, and other groups. Professional associations were important for within-group communication. Conservation organizations and Cooperative Extension were the only types of organizations with a high level of cross membership. The concern for non-game wildlife habitat has increased while concern over firewood harvesting has gone down. Overall there appears to be a convergence on what is desired but less clarity on how to do it or how to pay for it. If we are to bridge the gap between values and actions it will be necessary to translate scientific principles into workable approaches and make sure that the messages are spread through the effective channels. I submit that profession- and issue-based interest groups must be involved early if we are to avoid the costly polarization that has occurred over forestry and agriculture practices in California.

ACKNOWLEDGMENTS

Richard Standiford, John Le Blanc, William Tietje, Robert Schmidt, and Ellen Rilla all provided considerable support and helpful comments.

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