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California's Disappearing Frontier



The great frontier days of the American west are commonly thought to have ended nearly a century ago; but in California, at least one vestige of that period didn't disappear until much more recently.

Barely 50 years ago the supply of wildlands in California was considered so inexhaustible that anyone could buy what he wanted, and do with it as he wished cut it, burn it, convert it to agricultural use, and so on. If it didn't work out as planned, he could simply move on to the next valley and try again. No one worried about water or lumber or wildlife habitat-there was enough to last forever.

That time has passed. In the past 20 years in particular, Californians have become acutely aware of our dependence on wildlands and of the need to manage and conserve them judiciously lest they be lost or ruined forever.

Wildlands as we define them here—that is, all land not under cultivation or "under concrete"-constitute 85 percent of the state's total land area. They range from barren alpine areas to lowland deserts; from trackless wilderness to mosaics of forest and wildlife preserves within sprawling suburbia; from mountain meadows and forests to coastal wetlands. Collectively they represent the storehouse of our natural resources. We rely on them for water, for lumber and forest products, for livestock forage, fish and game, outdoor recreation, and countless environmental values. Brushland alone, the subject of attention in this issue of California Agriculture, makes up an area that nearly matches the total acreage in the state already under cultivation.

We have come to recognize that it is within these wildlands that California must solve many serious problems in the allocation of land in response to burgeoning social demands and decreasing supplies of natural resources. Many forces are exerting pressure on our wildlands-conflicts over environmental versus commercial uses, losses by fire and insects, wasteful utilization, and others that can only be expected to become more intense in years to come.

The impacts of competing uses, the effects of environmental protection, the need for saving endangered species, and the continuation of a sustained storehouse of soil, water, plants and animals present numerous problems for research as well as to land management policies.

Research on wildland resources represents about 15 percent of our current Experiment Station research program. There are distinct areas of concentration, notably forestry and range science, but overall our wildland research is intricately intermingled with many other elements of the research program. Wildland research is conducted to some extent in at least 17 of the 21 program areas in the Experiment Station system.

There are, of course, important differences in the groups to which agricultural research and wildland research are directed. The clientelle for the major portion of agricultural research are the producers, processors, suppliers, and consumers of agricultural crops and livestock. The products of wildland research are different and far more diverse, sometimes intangible, and in substantial degree produced and made available to consumers outside the mechanisms of the market system.

The growing public awareness of the importance of our wildlands is creating concern that the present research efforts may fall short of developing needed scientific knowledge soon enough to manage these resources effectively.

Certain areas of omission or very limited recognition stand out. For example, there is substantial research on insects and diseases affecting wildland vegetation, but research on the control of wildfires is negligible, even though fire control expenditures on wildlands totally overshadow insect and disease control programs. Similarly, the control of weeds and wildlife damage receive only limited attention. Marketing research on wildland products is extremely limited.

But more research alone is not enough. A sound foundation for better management and better yields from our wildlands requires a broad, coordinated, comprehensive program in research, extension, and teaching.

Finding the resources to conduct such a program poses a dilemma painfully familiar to Experiment Station directors across the nation. In the absence of new public funding there are only two alternative sources of money—private grants, or redirection of existing research programs. Private funds for wildlands research have been slow to materialize. Redirection of existing programs raises the question: What can we redirect? What trade-offs or sacrifices are we willing to make to increase wildland research?

The answer is not easy to come by.