

(2) Maximize permittee responsibility and accountability in both planning and executing the range program.

(3) Obtain range scientist input into all unit plans and utilize an interdisciplinary approach in developing all new and revised range management plans, to insure a balanced resource allocation.

(4) Provide the necessary range scientist input for land use planning and land adjustment activities to insure that land ownership patterns are considered in the light of their effectiveness in promoting sound conservation practices on associated private and public rangelands.

(5) Make maximum use of the interagency coordinating planning approach in developing all allotment plans to promote better management on associated public and private rangelands.

(6) Identify areas of unused or underused suitable range and place these in production, under proper management, for the benefit of the nation.

(7) Generate an effective cadre of range trained people (both line and staff) needed to accomplish the goal. Provide a continuing training program with development opportunities and an essential career ladder in order to attract and maintain a high level of range expertise.

This policy statement and objectives have specific targets for accomplishment. As a measure of progress, we will meet annually to see where we are. We believe this approach will provide better management visible on the ground. The key to good future land and resource management really lies in the willingness of everyone to cooperate and to accept any trade-offs that become more apparent as time goes on. If we plan the proper allocation of resources, with the best mix of uses, we will be able to optimize what we have. And if we do a more intensive job, we should be able to approach the 21st century confident that we will be able to provide an adequate supply of necessary products including red meat for the people of the nation through coordinated land planning.

## Viewpoint of a Wildlife Manager

JOHN W. McKEAN

Aldo Leopold, the father of wildlife management in North America, defined wildlife management as "the art of making the land produce sustained annual crops of wildlife for recreational use."

The wildlife manager has the difficult task of practicing that art on lands that are owned by someone else and dedicated primarily to other uses. This is one reason coordination, cooperation, and compromise are essential tools of the trade. Another reason is that the wildlife he plans for is the common property of all the people of the State or, more often, all 200 million U. S. citizens, most of whom want a voice in any decision.

For these reasons coordination in wildlife management planning has historically been a *must*, but as recreational demands approach the limits of tolerance of either the wildlife resource or landowners, more sophisticated systems of

coordination and planning become essential.

A diversity of multi-discipline planning systems have been developed, but in my experience they fall in two major categories: (1) Problem or area-oriented planning; and (2) comprehensive land use planning—county, state, and national.

The wildlife manager must be aggressive in both categories, so I will tell you briefly of some of our experiences in Oregon.

One of our first applications of a true multi-disciplinary approach to a resource problem occurred in the 1950's on a controversial deer winter range which had a long history of abuse by domestic livestock, wildlife, rodents, insects, drouth, etc. Several years of the pot calling the kettle black was achieving no constructive end until an interdisciplinary team composed of representatives of the Soil Conservation Service, Forest Service, Bureau of Land Management, Extension Service, Wildlife Department, and landowners objectively inventoried the problem area and developed a plan for constructive solution of problems. Not all of the remedies conceived by this task force have been implemented, but at least the landowners have a better understanding of the nature of the problem and potential solutions, and the public better understands the need for some regulation of wildlife densities on those lands.

Similar interdisciplinary planning programs have been conducted on selected problem areas or geographic subdivisions in much of our state and the federal land management agencies are now commonly using that approach in developing resource plans for federal lands.

A similar interdisciplinary approach has been used by the Oregon Wildlife Department in developing land use plans for over 100,000 acres of land within state wildlife management areas.

This kind of coordination in resource planning is:

Logical—because it is based upon inventories and knowledge of natural systems.

Simple—because it pools knowledge of many disciplines.

Flexible—because the resulting plans can easily be changed.

Practical—because it saves time and money.

The wildlife manager has a definite role in the broader mission of comprehensive land, water, and resource planning. Recognizing that man's manipulation of the environment is the dominant factor affecting the production of wildlife, wildlife agencies throughout the nation have necessarily become deeply involved in those decisions.

Using the "carrot and stick" approach, the Bureau of Sport Fisheries and Wildlife through the Pittman-Robertson and Dingell-Johnson Acts has offered some real incentives for the states to develop a meaningful data base for resource planning and to establish management goals. In addition to offering federal assistance in planning, they have provided that a state which has an approved state plan will not be required to write up detailed annual plans for approvable segments of the planned programs. Partially for that reason, but more importantly with the objective of developing a data base that could help land and water use planning bodies make better decisions, we launched an aggressive planning program in 1969.

Our first step was to assemble an inventory of all available fish and wildlife habitat in the State and the distribution and density of all major species of wildlife within those habitat types. With the assistance of other agencies we also made some guesses as to the changes that might occur during the next 20 years (1990).

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Our biologists recorded the required information on 1.2 million forms that were designed for reading by an optical scanner, and all of the data was ultimately deposited in EPA's STORET system. We now have the capability of retrieving that data by watershed, county, administrative district, wildlife management unit, or as a state summary in a matter of a few hours. As with most such sophisticated systems, we are finding some errors and omissions that are troublesome but the system is easy to update as better data become available. Our next goal is to interpret this massive resource data base and projections of demographic data into a strategic fish and wildlife management plan for our state. This plan will establish broad goals and strategies for achieving them.

The next step will be to develop operating plans that will implement the selected strategies. These will relate to geographic units of land and will require intimate coordination with many agencies and people who control the use of land and water. This kind of planning is important but I am confident that our greatest benefit will accrue from our capability to present accurate resource data to the county, state, and national planning bodies.

Some of the ecologically naive and preemptive resource management decisions that have come from Congress in the last two years shake my confidence in the rational approach to resource planning. Examples are the Wild Horse Act, predator control, the Marine Mammal Act, the recent Endangered Species Act, all of which propose to cure a sore finger by amputating an arm.

Similar emotional approaches have been used to expand the wilderness system in defiance of the orderly procedure specified in the Wilderness Act of 1964. It is clear that many urban people have been led to believe that consumptive use of wildlife, forage or timber on federal lands is in some manner damaging their equity in those properties. We as professionals have the challenge of getting the truths to them and developing those truths into meaningful plans that will assure them that we can continue to use the renewable wildlife and plant resources without jeopardizing the productivity of the land or resources for future generations. This will require a new kind of coordination.

## Summary of Significant Points

E. WILLIAM ANDERSON

It is fair to claim that we range resource managers currently know how to maintain or improve almost any rangeland resource. We have the science and experience. We have innumerable examples in existence that prove this can be done. This does not say that we know all there is to know. In this respect, however, we stand on a firm foundation of knowledge and know-how.

Knowing how to do the job is one thing. Actually getting it done is something else. Getting the job done by-and-large hinges on the effectiveness and thoroughness of communications between the key persons or groups involved. Among the many facets of communications in resource planning, coordination between agencies and the involvement

of state and public groups is paramount.

Coordinated resource planning is not new. My first experience with a coordinated plan was in 1948 when I was a District Conservationist for the Soil Conservation Service. In 1951, soil conservation districts in the West were pushing a coordinated approach to the development and conservation of public and private lands, which some may recall was called their Pilot District Program. These and many other early efforts were localized and sporadic. Generally speaking, no real advancement was made.

Within the last 10 years the situation has changed. Coordinated resource planning has become an accepted operating procedure. In Oregon, we have an executive group consisting of the heads of Forest Service, Bureau of Land Management, Soil Conservation Service, State Wildlife Commission, State Conservation Commission, and both the Oregon and National Association of Conservation Districts. A task group made up of staff specialists is assigned to provide leadership, training, and special assistance to the program. Other key groups that are often involved in coordinating planning include Cooperative Extension, State Forestry, and State Lands. Operators of private resources in the planned area are always involved in the planning process.

Guided development of coordinated resource planning in recent years has evolved several points, in addition to the gross necessity for working together, that are significantly appropriate in today's resource program.

1. There is a great need for resource planning to give full consideration to the second and third order of consequences that likely will take place as the result of a planned achievement.
2. The "good top inch of soil" and similar basic resource considerations need to be revitalized because they are often forgotten in today's dollar-oriented resource management.
3. There is no substitute for a sound, ecologically-based resource inventory as the foundation for decisions dovetailing management of all major resources of the planned area—water, wood, wildlife, forage—each of which should no longer be planned independently.
4. The economics of managing a resource-oriented enterprise logically involves the total land area used by the enterprise. Therefore, if a resource plan for an enterprise is to be sound and practical, it, too, should cover all the land ownerships and resources involved yearlong.
5. Current concerns with the environment and increasing knowledge of cause-effect interactions in resource use have brought into perspective and emphasized the need for combinations of measures, treatments, and developments—a resource management system—instead of piecemeal application of single practices. In resource management systems the focus is on changes and improvements that meet the objectives of the people concerned, consistent with requirements for maintaining or improving the resources.
6. Well-meaning, but often misinformed, uninformed, tunnel-visioned, or antagonistic persons or groups still exist in resource work; however, to a lesser degree than just a few years ago. The ameliorating force that can be most effective in resolving this problem in communications is a face-to-face exchange of viewpoints on objectives and alternatives—coordinated planning.
7. If resource users, owners and managers will collectively make resource decisions, the courts will not have to do this.

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