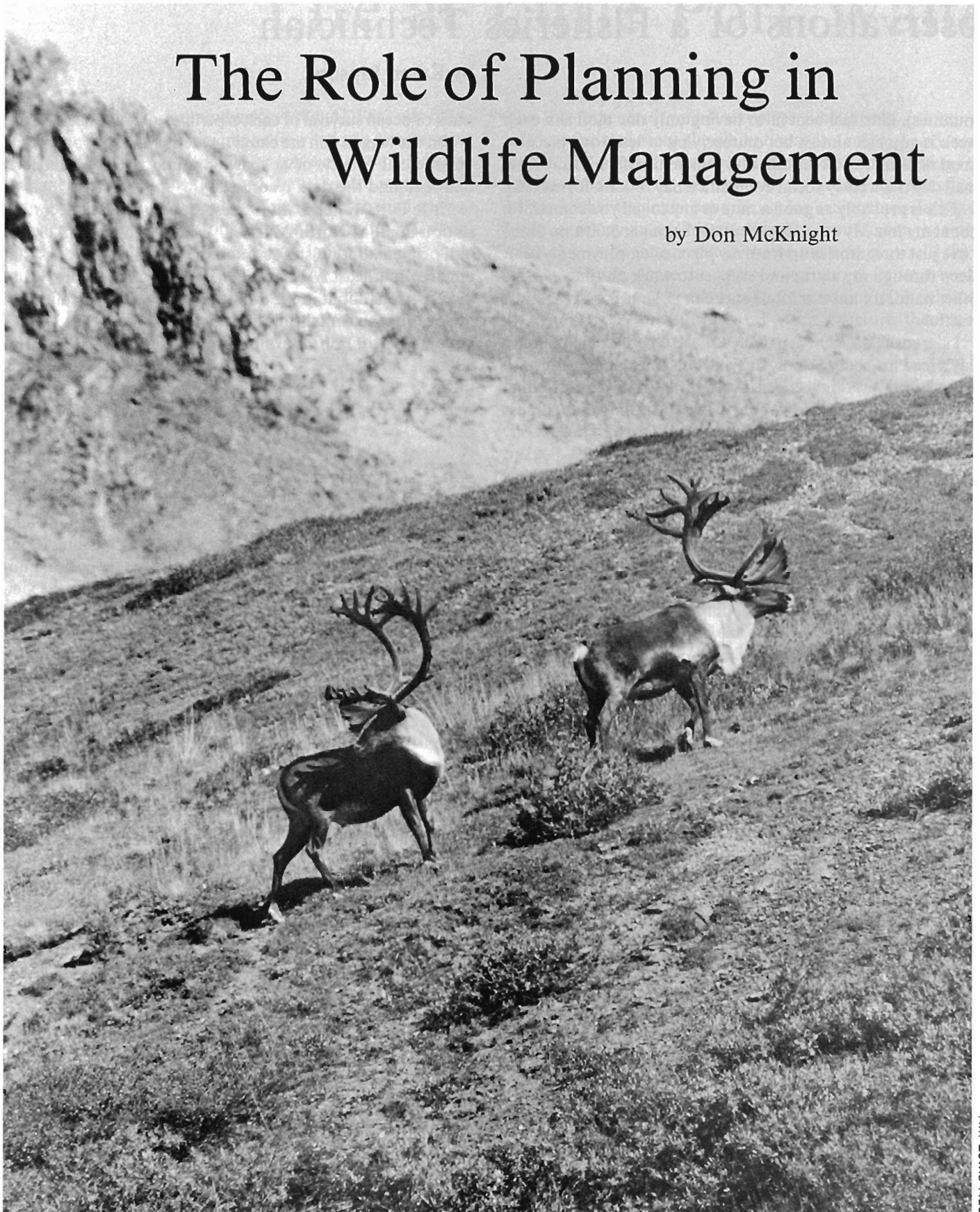


# The Role of Planning in Wildlife Management

by Don McKnight



Tim Lewis Rue

Most people envision wildlife biologists as being outdoorsy-looking sorts peering through binoculars at a distant animal or affixing a radio transmitter collar to a recumbent bear or wolf. Such is the magic of television and other news media in creating images. Furthermore, we all probably prefer to think that these people with whom we have entrusted *our* wildlife spend most of their working hours obtaining the facts and information basic to conservation of these precious resources.

Without question, wildlife managers prefer to work with animals in the field as much as possible. After all, that is why most of them chose this profession: their interest in the animals and love of the out-of-doors. It should come as no surprise, however, that actual field work with animals is but a small part of a wildlife biologist's duties. Each trip to the field must be well planned and organized in order to ensure attaining maximum results with the time and money expended.

Not only must the technical aspects of the program be properly designed, but it is also necessary to plan for appropriate logistics and weather and even for such mundane matters as feeding and housing the personnel involved. Anyone who has gone camping here in Alaska can appreciate the necessity for adequate planning; those who have gone into the "bush" for an extended period to construct a cabin can truly relate to the need for planning. Planning is, in fact, fundamental to any human activity aside from the most routine or redundant.

Planning for all of us may be something so simple and obvious as setting an alarm clock in the evening so we may wake up at a certain time the next morning, or packing a toothbrush to practice dental hygiene when away from home. On the other extreme in a wildlife agency, planning can entail orchestrating the work of several hundred individuals throughout a state the size of Alaska in order to maximize the collection of appropriate information on a large number of diverse wildlife species and habitats so these resources can be appropriately managed. As each individual must plan his/her activities to ensure optimum positive results from these activities, those responsible for administering the activities of many others must plan also—on a larger scale.

Generally speaking, the greatest limitation to both the quality and quantity of information available on wildlife populations is the budget. If money and manpower were unlimited, a wildlife management agency could gather enough information to ensure that all resource decisions are made on the basis of fact. Budgets are anything but unlimited, however, and fiscal constraints are something we all must recognize. For this reason, planning and budgeting in wildlife management are inseparable. We must plan in order to get the most solid and useful information and to provide the best public service with the limited

funds available. Without adequate planning, for example, available funds and manpower can be squandered in one area to the exclusion of another, or on one species rather than on another more "deserving" species. Public services must be provided where the public is, and emphasis on management programs must be focused in areas or upon species where there is the greatest need. Priorities must be established, appropriate programs set in motion, and the results of these efforts evaluated after the work is completed. Each of these activities is a fundamental aspect of planning.

The Division of Game, ADF&G, has been involved, for a number of years, in developing management plans. Some of this effort was part of a long-term systematic approach to managing wildlife statewide in a coordinated manner. Other plans for specific areas and species were developed in response to specific problems. The emphasis in each instance was on the product—the plan itself—rather than on the process of planning. This distinction may seem superficial, but experience here and in other states has shown that for planning to be effective, emphasis must be on planning as a process. Plans themselves should be considered only a product of an effective planning process.

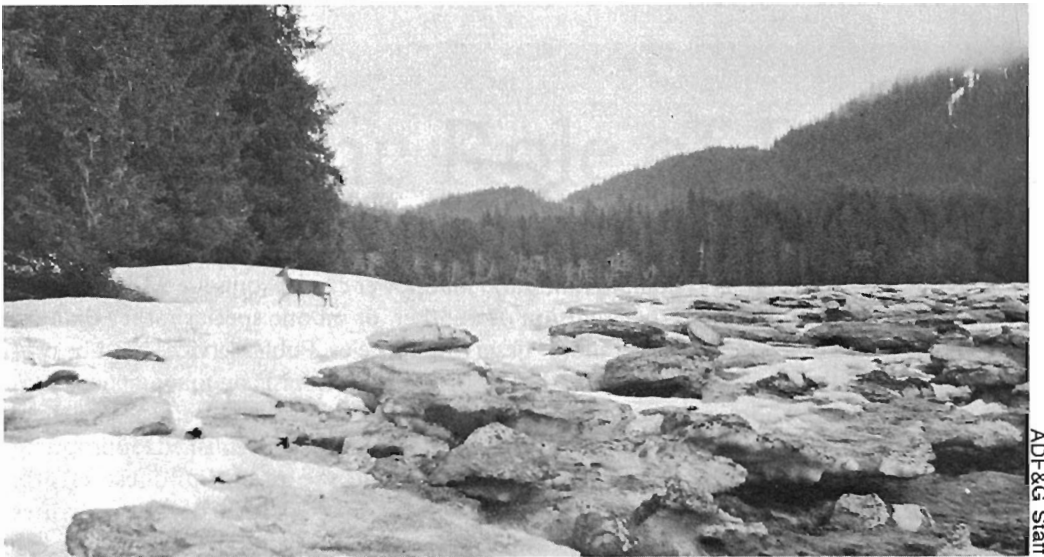
Effective game management planning, like any planned management system, must be based on the following elements:

- 1) An inventory of the resources available;
- 2) A formal objective or list of objectives which we wish to attain;
- 3) A plan of action which will result in attainment of those objectives; and
- 4) A process through which success or failure in attaining results can be measured.

In simple and logical terms this translates to 1) knowing what we have; 2) deciding what is desired; 3) determining how to obtain what is desired; and 4) evaluating our success in obtaining what is desired.

Because Alaska's wildlife resources, at least those hunted or trapped, are inventoried regularly, this basic element of planning is already well established. Considerable progress has also been made toward development of objectives for our various game herds and populations. Depending on the level of sophistication of our information about a population or herd, objectives can be expressed in a number of ways, as long as our stated objectives are both reasonable and measurable (so success in attainment may be subsequently assessed). Several examples of existing objectives demonstrate this:

- 1) Unit 1D (Haines area) moose: To develop a population by 1990 capable of sustaining an annual harvest of 40 moose while maintaining a post-hunt bull:cow ratio of 20:100.
- 2) Unit 4 (ABC Islands) deer: To maintain a population



which will sustain an annual harvest of 1.5 deer per hunter with a hunting effort of no more than 4 days per deer with males comprising no less than 60 percent of the animals harvested.

- 3) Nelchina Caribou Herd (Unit 13): To increase the Nelchina Caribou Herd to a precalving population of 30,000 adult animals by year 1989.

In each example, the objectives seem reasonable on the basis of both biology and public desires, and in each example objectives are expressed in measurable terms. Because it is possible to accurately count caribou, objectives are expressed as numbers of caribou. For moose, accurate assessment of numbers on an annual basis would be prohibitively expensive and herd status generally is measured by sampling sex and age ratios—hence, objectives are tied to these ratios rather than animal numbers. In the case of deer, where assessment of numbers is virtually impossible, objectives must, by necessity, be expressed in terms of harvest and hunting pressure which are measurable.

Once objectives for each population or herd are established, each biologist must develop an operational plan which will do two things: monitor the status of that herd or population and provide a management program designed to attain objectives for that herd or population. This operational plan is the element of planning which translates objectives into budgets. In order to obtain the information, be it harvest data, survey data, or whatever, to measure this population's status, biologist Y must conduct the following activities which will require X amount of person-months of effort and X amount of dollars. In order to increase the size of this herd to the desired level (objectives), that biologist will need to do the following which will cost X amount of dollars, etc.

The final critical element of a planned management system is evaluation of results. This element provides the basis for a systematic internal (within the agency) review of program costs and results and provides the opportunity for members of the public, the Alaska Legislature, or other agencies to evaluate the overall success of Game Division's management programs. Also on the basis of this review, objectives can be modified to better

reflect public sentiments, or changes in the biological capability of a population. Redundant or otherwise unnecessary activities (which, of course, translate to dollars) can be identified and eliminated, and other, important, activities funded and implemented. This element also provides a basis for evaluating the performance of employees and their supervisors.

Planning which focuses on the process rather than the product is a continuing activity—it can never be finished and set on a shelf to gather dust. As wildlife populations, their habitat base, and public wishes and desires change with time, this dynamic planning system will identify and help bring about the program modifications needed to accommodate these changes. Objectives will be reviewed regularly (at least annually) and will be modified as necessary. As objectives are refined or modified, operational plans must be modified to reflect these changes. Because this dynamic process incorporates the budgetary process for Game Division, it will help ensure that:

- 1) Available funds and manpower are allocated to projects on the basis of merit and priority;
- 2) Management direction will not vacillate with changing personnel or political whim;
- 3) Management strategies will have the ability to respond to change in a productive rather than reactive manner, reducing the need for "brush fire" management;
- 4) Interested members of the public or personnel from other agencies will have ample opportunity to express their concerns and preferences regarding management of Alaska's wildlife resources and the use of public funds for this purpose;
- 5) Existing management programs will receive a systematic and thorough review on a regular basis; and
- 6) There will be a sound basis for evaluating the appropriateness of existing wildlife management programs and the performance of division personnel.

*Don McKnight serves as Planning Chief, Division of Game, ADF&G.*



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