

Suffice it to say, and you can take my word for it, there is controversy and we expect it to continue and perhaps intensify for a few more years until we "prove up" on stated intent.

With this as an introduction, let me briefly review some of the major events of the past two years and then go on to state a control philosophy and describe the elements of our new program.

Just two years ago at this same Conference, held in Las Vegas, Dr. A. Starker Leopold presented the report of Secretary of the Interior Stewart L. Udall's Advisory Board on Wildlife Management -- the so-called "Leopold Report" on Predator and Rodent Control in the United States. Many of you were present. Others have carefully studied this historic document since its release.

The Board recommended the appointment of an advisory board on predator and rodent control; a reassessment by the Bureau of the goals of its predator and rodent control activity; the development of rigid criteria for determining when and where there is a need for conducting animal control; a greatly amplified research program; a new name for the predator and rodent control arm of the Bureau; and, legal controls over the use of poisons. It generally recommended a complete reassessment of the goals, policies and field operations of the Division of Predator and Rodent Control, with a view to limiting the reductional activities strictly to cases of proven need, as determined by rigidly prescribed criteria.

As most of you know, Secretary Udall accepted the Leopold Report on June 22, 1965 as a "general guidepost for Department policy..." In effect, the Board crystallized thoughts that had become current and its Report became the instrument for needed change. Many assume the Report is the working manual for the Bureau. This is not the case. It is a useful and important guide. Perhaps its most important contribution is not the specific recommendations but its reflection of a changing American attitude -- a shift in the public conscience.

Secretary Udall's acceptance of the report is well known and need not be repeated in detail here. In essence, he pointed out that, while the Department did not intend to abandon its animal control responsibilities, new guidelines would be developed to assure that control would be conducted when and where necessary, using the most selective, efficient and economical methods, based on sound ecological principles and that the Department was concerned with the wise husbandry of all wildlife resources.

It is within the framework of this broad policy statement that we are now working -- it is this broad policy that we have begun to implement.

The recommendation of the Leopold Committee for a new name for the Division of Predator and Rodent Control was effected on July 1, 1965, with establishment of a new Division of Wildlife Services. This was far more than a simple change in name. It was the establishment of a new division, with added responsibilities, intended to improve conditions for other wildlife resources. On August 1, the working titles of all Division personnel were changed, coincidental with the effective date of the reorganization plan for the entire Bureau.

As now constituted, the new Division will have responsibility for the animal control activities of the Bureau but will have added responsibilities in wildlife resource enhancement work and pesticide surveillance and monitoring.

In enhancement work, emphasis will be given to migratory species, both game and non-game, with initial effort on Indian, Military, and Interior lands. This program will not duplicate or compete with existing programs. The needs are so great that the challenge is one of determining where to channel the effort to realize maximum results.

The pesticide surveillance and monitoring program is being designed to prevent adverse effects of pesticide applications on wildlife and the total environment. Initial surveillance efforts will be on Interior and other Federal lands. The monitoring phase will contribute to the National Monitoring Program to determine residue levels at fixed locations and at predetermined intervals. This began last December, when the first samples of duck wings were taken from collections being made in each flyway for other purposes.

The most important development in animal control has been the preparation of a completely new policy, now in the review stage. Before commenting further on this policy or its implementation, let me discuss the morality, ethics or the "ecological conscience," if you please, of animal control.

We view animal control, or more properly, animal management as one of many necessary and legitimate resource management tools -- not unlike habitat improvement, stream and lake treatment to remove the so-called trash fish and replace them with sporting varieties, range restoration, reforestation, harvest and a host of others. Hunting, or harvest of big game, quite often is simply an acceptable form of animal

control. Like all management tools, animal control must be applied intelligently and responsibly, or it merits just criticism.

Let me turn for a moment to the "balance of nature," that holy cow that continues to haunt modern day, professional resource managers. At the risk of being sacrilegious, I submit that scientists who continue to babble about the balance of nature, without qualifying that concept considerably, do the public a great disservice and retard sound resource management.

I think and hope we all recognize ecological relationships -- this is what we are really talking about. But, let me remind you that, according to Webster, ecology is defined as "... the mutual relations between organisms and their environment..." And, it has always been my understanding that this meant the total environment -- an environment drastically modified by man since early colonization; yes, even before the arrival of the white man. Sociological change has made a new and increasingly drastic imprint on traditional ecological relationships.

The plain fact is that we now live in a synthetic environment, modified by the most complex civilization in the history of man -- megalopolis, roads, intensive farming, pesticides, livestock grazing, pollution, atomic testing. You name it. It follows logically that we must manage resources within the framework of this synthetic environment, responsive to sensitive ecological relationships, and receptive to the obvious needs of an expanding human population.

It then becomes incumbent on all resource managers, planners, industry, agriculture and the public generally to avoid the extent possible, further adverse impact upon our resource base and the environment generally. This is the attitude we intend to assume.

Now let us be more specific. The activities of man have adversely affected some wildlife species, including some kinds of game species. These same activities, however, have improved conditions for other species and even changed their behavioral patterns to the point where they are now overabundant and in situations where they pose serious problems.

Blackbirds and starlings are good examples. Last year fifteen State Farm Bureau Conventions passed resolutions urging assistance with bird problems. In Ohio some counties have had to quit growing sweet corn.

Likewise, conditions for some birds, including starlings and gulls have been improved in the vicinity of airports, both military and civilian, posing real threats to human safety. The number of air strikes is

continually increasing, and, as you know there have been two civilian aircraft strikes that cost over one-hundred lives.

Plague and rabies pose lingering and potential threats -- both animal-borne diseases -- not to mention histoplasmosis, a pulmonary disease associated with starling roosts and some other birds. Last summer there was one human death and over a dozen human exposures from plague near Gallup, New Mexico. And the highest known incidence of rabies in an urban bat population was recorded last summer in a major eastern city.

The moment man began grazing livestock he quite naturally came into competition with the larger carnivores that, by their very nature, prey on ungulates.

Grazing had still another impact -- generally, any grazing improves the conditions for some rodents, such as the gopher; and overgrazing frequently provides an ideal situation for some rodents that then become, under some circumstances, a further threat to the range.

Let me pause at this point to make a comment on range ecology and management. It is pointed out by some that past range abuse has resulted in increased rodent numbers and, because of this we should not control the rodents which are a symptom, but correct the cause -- namely, overgrazing -- and let the rodent situation take care of itself.

The advocates of such an approach are living in the past. Yes, there have most certainly been serious range abuses. But there is general progress, though it may be slower than many of us would hope for. If rodent control is a part of a planned range restoration program and will hasten a healthy range condition, is it not more prudent to employ a control tool than to take the attitude of "you did it, you clean it up"? Healthy ranges and watersheds are in the best interests of the general public.

Also, within this synthetic environment in which we live, there persists the perennial argument: Do predators control prey numbers or do prey numbers regulate predator numbers? The bulk of the scientific evidence suggests that the latter is true; that the breeding potential of the prey species is greater than that of the predators who respond to an increase in numbers but do not provide effective control. But speculation, based on would-be scientific logic, runs rampant -- stated as fact by scientist and layman alike. But where are the facts? The simple truth is that we do not yet clearly understand these relationships. We need more research and less speculation.

So we live in a synthetic environment and it frequently becomes necessary to control animals for various reasons. Let me be clear on this point: So long as Congress appropriates funds to this Bureau, and directs that we do so, we intend to control animals when and where necessary in the most intelligent and responsible manner possible, using the best tools, with the most efficacy, and with full recognition of the ecological interrelationships.

Speaking of tools and techniques, we must use the best available and this is what we are doing. Some compounds and techniques we would like to see replaced and we are working on this. But, until we have better techniques, we will do our best with what we have.

Now, let me state also very clearly the other side of the story: This Bureau will conduct or participate in animal control activities in situations only where there is a clearly demonstrated need, in situations where there will not be significant adverse effects on non-target species and the environment generally. Several hard decisions have already demonstrated the Bureau's determined intent to hold the line.

Now, how do we propose to effect the necessary changes to meet our control responsibilities intelligently and at the same time avoid damage to non-target species and the environment generally?

For too long those concerned with animal control have focused on the offending species and this has seemed logical. There has been entirely too little attention to the combination of circumstances -- again, the ecological situation -- that has created favorable conditions for the problem animal. It is the total ecological situation, not a single species, that results in a pest situation -- usually the results of man's activities.

Ironically, the attention to the animal itself and our efforts at simple reduction have often been little more than a good management program acting to manage or maintain the so-called pest at an optimum level.

It is time we re-examine man's activities in relation to the environment to determine whether the application of ecological principles would not, in the long run, prove more economic and more desirable. We have become too "single purposed" in our management objectives; and I apply this generality equally to agriculture, forestry, wildlife management in general, and animal control in particular. While direct control of the offending animal will probably be a necessary expedient, the challenge is in making the necessary ecological adjustments to prevent pest situations.

Now, let me turn to a few statements on policy. Animal control will be conducted to assist in accomplishing four major program goals:

(1) Public health and safety, when it is necessary to control animal-borne diseases, such as plague and rabies and to prevent safety hazards, including aircraft-striking birds.

(2) Improving agricultural production, including the protection of livestock and standing and stored crops.

(3) Resource management services, including necessary bird and rodent control to insure the success of range restoration, reforestation and watershed projects and wildlife management where control is essential to wildlife introductions, or undertakings to increase wildlife numbers.

(4) Urban and industrial services, when control is necessary to protect buildings and residential areas, stored manufactured products, and underground conduits and similar installations.

These four goals can be pursued either directly, on an operational basis when the proper methods can be applied only by skilled professionals, or through a program of technical assistance to land users and commercial operators to assist such people in conducting their own control programs.

In our search for improved techniques, continued field testing will, of course, be an important part of all four goals.

I want to stress one point of the new policy as it relates to the four program objectives -- we intend to place increasing reliance on the land and resource managing agencies; on public health officials; on industry and agriculture; and on their responsible officials and elected representatives in determining when and where there is a demonstrated need for control.

It is quite obvious that such is not the sole responsibility of this Bureau. Control is a management tool, to be applied when needed to accomplish a broader management objective and, if needed, it should be included in the plans prepared to accomplish that objective.

How lands will be used and managed is a responsibility of the land and resource management agencies. If these managers identify a use that requires a degree of animal control to achieve a planned objective, appropriate control techniques will be applied by the Bureau.

By making control available only when the need for control is included in the resource management plan of the appropriate agency, we hope to encourage preparation of long-range resource management plans.

The Bureau clearly recognizes a need for new and more sophisticated techniques, and we are intensifying our efforts to develop these through research. We should be able to improve our efforts and at the same time make these more selective. We cannot expect, however, that research results will be accomplished by tomorrow or next month.

We intend to determine, through independent sources, annual data on losses, damage, and disease on a national scale. The United States Department of Agriculture has agreed to assist in this effort.

Before the Bureau's new policy is finally adopted, we shall consult with the user groups, other cooperators, major conservation organizations, resource management agencies, public health officials and others.

One thing that has been extremely difficult is to develop guidelines for determining a demonstrated need. It is a matter of real concern to those of us charged with the responsibility of determining that need. We think, however, that we have found the answer and that we can do this on a sound basis.

We are adopting a management system of planning, programming, and budgeting. In this process, planning, programming, budgeting and reporting are all associated and tied directly to end objectives and criteria for action. Through this system it will be possible to determine whether there is a demonstrated need for animal control -- and the Bureau, cooperators, and interested bystanders can see where we are going and why.

An annual plan of work will be developed for each State. This plan will rely heavily on land planning and zoning, and the management plans of other local, State, and Federal resource agencies. On Federal lands, it will be tied to the multiple-use concept now being applied by the Forest Service and the Bureau of Land Management. It will identify specific program objectives.

The plan will not be an animal control plan, but a series of goals which require animal control, among other actions, to achieve success.

If a given tract is identified by the managing agency or the owner for grazing purposes, animal control becomes one of the management tools.

By the same token, if an area is identified by the land managing agency as a primitive or wilderness area, and grazing is not one of the planned uses of these areas, it will be clear that there is no demonstrated need, and control will not be practiced; however, peripheral control might be needed around the exterior boundaries to prevent these areas from serving as reservoirs of predation.

If the Bureau of Land Management or the Forest Service intends to initiate range restoration or reforestation on a given acreage, rodent control would be one of the necessary management tools to accomplish this undertaking successfully. Here again, there is clearly a demonstrated need and a specific objective that can be spelled out in terms of a resource plan and the number of acres involved.

This concept can be applied in virtually every situation, and ultimately result in a complete State plan. When the plan is completed, in consultation with cooperators, landowners, and agencies, it will be translated into a program and provide a realistic basis for preparing budget estimates. It will also serve as the basis for identifying manpower needs and selecting alternatives. Monthly and annual reports will then cover progress, or lack of progress, on each of the identified objectives.

Thus, for each State in the Nation, and consolidated for each of the Bureau's regions, we will have a clear-cut course of action that will aid us in supervising more intelligently a basic resource program for the benefit of the many publics which we serve.

Improved manpower utilization is essential to more effectively meet our responsibilities in the most economical and most responsible manner possible. For this we need flexibility, improved supervision, increasing use of the advances in modern technology, and an aggressive training program.

Training is fundamental. To some it may seem a luxury or icing on the cake. In our view, it is a matter of the highest priority and will precede changes in our operations. We must maintain a staff of highly skilled professionals, able to move swiftly and using the latest techniques, in harmony with other uses of the land and other public values.

Applying new technologic advances will be extremely important in pursuing a more efficient, yet more selective program. The Bureau continues to increase its efforts to find improved methods of control through research and field testing, working with cooperators.

The concept of integrated control is gaining acceptance in insect control work. We intend to apply this concept to vertebrate animal control. First, we must examine the specific problem to determine if there are alternatives to direct control. If not, we must then determine what combination of methods, taking advantage of the ecological situation, that will achieve the desired results with minimum side effects. Ideally, this would permit us flexibility in focusing several appropriate techniques to secure an acceptable level of control. Integrated control would also broaden the control base and take cognizance of the dynamic forces which are continually changing.

I could not close this discussion without commenting on personnel, specifically those in the Division of Wildlife Services. Our people look forward to the challenges of the future. They are confident and willing. We now have the most important ingredient for success -- willing and highly trained personnel. A high percentage of the Bureau people in the Division have degrees in resource management.

We are in the process of attempting to create a climate that will stimulate individual and collective excellence and a high degree of professionalism. We propose, by providing the challenge and through training, continuing education, persuasion and encouragement, to develop to the fullest extent possible, the full capabilities of every man in the Division.

We then propose to bring this capability and talent to bear in discharging an intelligent and responsible animal control program and move into pesticide surveillance and wildlife enhancement work.

This is our "new look." Thank you.

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