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Keynote Address - Wildlife Damage Control And The Cooperative Extension Services

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KEYNOTE ADDRESS – WILDLIFE DAMAGE CONTROL AND THE COOPERATIVE EXTENSION SERVICES

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ABSTRACT: Since the establishment of the Extension Service within the United States Department of Agriculture in 1914, in accordance with the mandate of the Smith-Lever Act, Extension personnel have recognized the need and responsibility to provide educational programs to assist clientele both rural and urban. These programs from the "grass roots" level to the Federal level are based on the long established premise that assisting people with factual, effective and practical educational programs to help them solve problems, evaluate alternatives and make objective decisions, would provide these people with information that would enable them to help themselves. Wildlife damage control was recognized early on to be an area where Extension programs were needed and it continues to be one of the roles and responsibilities of the total Cooperative Extension Service educational program.

INTRODUCTION

Program Chairmen, participants and honored guests, it is a privilege to be a part of this workshop. In fact, in this period of budget cuts, those real, predicted and threatened, it is a privilege to be able to travel, although with the current trend you always worry that by the time you return your desk may not be there. The purpose of this address is to hopefully set the stage for the Fifth Great Plains Wildlife Damage Control Workshop. The objective is to build on the success of the four previous workshops by (1) providing a synopsis/review of the current work underway; (2) continuing to implement wildlife damage control as an integral part of the science of wildlife management; (3) evaluating the changing needs in wildlife damage control; (4) fostering increased cooperation and coordination between agencies, organizations, researchers and users requiring better wildlife damage information; (5) divising new and effective methodologies within the parameters of increasingly tighter restrictions and decreasing availability of control agents to prevent and/or control the depredation to crops, livestock, forestry and urban properties; (6) prevent and/or control the diseases, parasites and other potential health hazards to man posed by damaging wildlife; (7) to control extensive depredation on other natural resources caused by wildlife; and (8) to assist private landowners in controlling wildlife damage while maintaining and enhancing habitat for other wildlife even as it is diminishing on private lands.

In examining the titles of presentations to be made during this workshop, it is evident that Bob Timm, Ron Johnson, Ron Case, and other members of the program committee have done an excellent job in obtaining speakers from a wide spectrum of interest in wildlife damage control. It is also expected that each of the speakers will represent their agency, firm, organization or profession with their expertise and special interest, and will deal effectively with the topic assigned to the title of their presentation. We are all aware that wildlife damage control has some caveats; it is not a new problem--it has always been a vital element in the protection of the human interest; it is not a problem that lends itself to easy answers; it is not a problem that is going to disappear; and it is a problem area that will probably always be controversial, primarily because the multitude of people are never faced with "their ox being gored."

Within the confines of the time and space of this address, it is my charge to bring you up-to-date on the function of the Cooperative Extension Services (CES) in wildlife damage control. Although this is not a discussion of a new program and I know that many in attendance at this workshop either work for a Cooperative Extension Service, have worked cooperatively with or know something of this organization, it might be worth exploring briefly the history of its role in wildlife damage control. Throughout this paper, Extension, Extension Service, and Cooperative Extension Service may be used interchangeably, as will extension wildlife specialists, wildlife damage control specialists, and extension specialists.

Historical Perspective

The Cooperative Extension Service originally called the Agricultural Extension Service, was created in 1914 by the Smith-Lever Act, and is a three-way partnership involving federal, state, and county (or local) people and funding. The primary function originally was to provide for the needs of rural people to learn about and implement the agricultural knowledge available to help them improve their production of agricultural crops, their standard of living, and to maintain the environmental integrity of their community. Although the programs provided by Cooperative Extension Services today have been broadened and strengthened significantly since 1914, the medium used to accomplish these objectives has not changed. That medium is education.

Extension programs are "grass roots" directed efforts featuring the presentation of educational information in informal settings based on research findings from the U.S. Department of Agriculture, other federal and state agencies, and the complete resources of Land-Grant 1862 and 1890 Institutions. It provides factual, objective, practical, problem-centered and people-oriented information to help people help themselves--to solve problems, make decisions, and to take advantage of new opportunities. The clientele reached by Extension has expanded and include the people of each county, both rural and urban, in every state and territory of this nation, as its point of delivery.

Extension assistance in wildlife damage control, although existing from the beginning, did not enjoy the benefits early on of a professionally trained wildlife biologist until 1936. With the mandate of the 1931 Animal Damage Control Act being encouraged, it is not surprising that extension educators acknowledged wildlife damage control as a needed responsibility. Not only was the first state extension wildlife specialist employed as early as 1936 in Texas, but later that same year, the first federal extension wildlife position was created and filled. Responsibilities for these positions outlined in a Memorandum of Understanding between the Federal Extension Service and the Bureau of Biological Survey, included wildlife damage control.

In 1939, the Bureau of Biological Survey, USDA, was transferred to the U.S. Department of the Interior, and one of its authorities was the Branch of Predator and Rodent Control. In 1941, the Memorandum of Understanding between the Federal Extension Service and the Bureau was updated, however, it retained a primary responsibility with cooperative relationships relating to rodent and predatory animal control in the United States. In 1946, the Cooperative Agreement between the Federal Extension Service and the U.S. Fish and Wildlife Service was signed which broadened the cooperative relationships significantly. Again, however, the control of predatory animals and injurious rodents plus wildlife disease control made up two of the nine listed responsibilities.

Other updated MOU's and cooperative agreements have been signed between USDA, Extension Service, and the Fish and Wildlife Service, with the most recent in 1977. Subsequent updating between state Cooperative Extension Services and regional offices of the Fish and Wildlife Service have been signed as recently as 1980, and presently, 45 states have existing cooperative agreements.

Looking back, it is interesting to note that the federal extension wildlife position was filled for only two years, from 1936 to 1937, and remained vacant until 1969, when it was again filled until 1970, and was vacant again until October 1979. However, most important is the fact that during this interim, many state Cooperative Extension Services, following the successful program in Texas, established extension wildlife programs. Today, extension wildlife positions are established in 31 of the 50 states.

Obviously, along with other wildlife management responsibilities, wildlife damage control continues to be a vital extension role. It is noteworthy that tripartite agreements for wildlife damage control between Extension, the Fish and Wildlife Service, and the respective state fish and wildlife agency exist in some states. Similar agreements in some states include the departments of agriculture and other agencies for wildlife damage control.

Role of CES in Wildlife Damage Control

The Cooperative Extension Services across this country still expend much of their time and resources in working with agricultural producers, marketing, processors, distributors, and users as it should. However, it also expends resources in providing educational programs to assist other needy clientele.

Basically, the role of Extension in wildlife damage control is to utilize its extensive and effective delivery system to interpret the available research and technical information and to provide it through educational programs to help people help themselves. Extension programs can potentially reach these vast audiences through both formal and informal educational efforts, although the emphasis is on the informal approach. This information is disseminated to clientele through a wide diversity of methods. Nationwide, Extension has 3,150 county offices with programs in every state, county, and territory. Through this delivery system with over 17,000 professional educators, a variety of information and educational programs are disseminated, ranging from agronomy--to wildlife. Extension can reach many audiences that other agency programs cannot reach because it has a long established credibility, it does not have a regulatory or advocacy function, it utilizes over a million volunteers, and it dispenses no funds to the public.

The educational efforts utilized in extension programs include almost all means of information delivery except the formal classroom efforts for credit. Extension utilizes mass media, radio, television, newspapers, etc., as well as an extensive variety of publications, leaflets, bulletins, workbooks, plans, etc. However, the grass roots delivery of demonstrations, workshops, and pilot programs is the meat of the system along with delivery from state specialists through the county extension personnel to the needy clientele. Through these systems, along with workshops, training courses, and other efforts, clientele from the farm to the city, including the professional, can take advantage of extension educational programs. Although Extension has moved cautiously, it is beginning to expand its capabilities

through new techniques and systems to get information to people and to gather information. The use of advanced electronic communications, computer programs, special reporting, etc., not only will improve our capabilities, but will hopefully save travel funds and increase our effectiveness.

Extension specialists try to keep current on new research, techniques, methodologies, regulations, and other information in order to provide factual, effective, and practical answers to clientele requesting information on wildlife. They identify research needs and interpret these needs through established systems. Concurrently, they interpret research and deliver it to the people who need it so that it can be understood and put into practice. Extension relies heavily on the complete resources of the Land-Grant Institutions for research information and provide this information to the grass roots clientele by interpreting this research and delivering it through the county extension system.

The state Cooperative Extension Service specialist is confronted at one time or another with requests for all kinds of wildlife damage control information. The range is from house mice to livestock predators, from sparrow damage to golden eagle predation, and from how to keep snakes out of the house to skunks out of the central air unit. In fact, although the most economically damaging wildlife problems come from the agricultural communities, the majority of their questions in many states may come from the urban communities. The problem may not be as economically significant but it may require considerable time and effort to address. Jackson (1980) reported that county extension agents in Georgia handled approximately 60,000 vertebrate wildlife damage questions per year. This estimate of reported requests is not available for every state, however, I strongly suspect that this figure is considerably larger in many states such as California, Texas, and others.

Although I could get into specifics about how extension specialists and county extension personnel help people with wildlife damage problems, let me take this opportunity to assure you that our role and responsibility is educational, not operational or service control. We do rely heavily on on-site demonstrations, pilot projects, and use of key clientele to get the techniques and methodologies adapted with and through the county extension program personnel. One of the strengths of these programs is that the clientele can better identify and implement the needed practice when they can see it demonstrated in the field. We do cooperate with the Fish and Wildlife Service and state fish and wildlife agencies to help identify the need for service and/or operational control and to help identify and get these professionals together with the needy clientele through the county extension agent. However, I stress the fact that Extension's role is educational, not operational. It stresses non-lethal, non-capture/preventive type control where possible, expanded to the use of lethal, capture/population control when necessary. It stresses selective control targeted toward the offending animal whenever and wherever possible. Extension specialists try to assist people to control depredating wildlife while concurrently encouraging and supporting the perpetuation and enhancement of habitat for preferred wildlife.

I previously mentioned the fact that over the years Extension's clientele has expanded and changed, but that we will continue to support and to put much of our effort in working with agricultural producers and related areas to sustain food and fiber production. However, we also expend considerable time and resources in working to help educate the user of agricultural

products, the urban and other audiences throughout this country. This occurrence has not been because of a shift in emphasis away from agriculture, but because the key word is education. Education of the nonagricultural producer, the majority of whom are far removed from agriculture today--the consumer is extremely important.

Some of you are aware that according to the 1980 U.S. Census--only 2.7% of the population now live on farms. This is a tremendous reduction from the period between the end of the Civil War and the passage of the Smith-Lever Act of 1914 when almost 50% of the people lived on farms. This figure of 2.7% relates to the rural civilian population living on farms regardless of occupation. These estimates are based on the farm definition introduced to farm population statistics in 1978. Under this current definition, the farm population consists of persons living in rural areas on places that sold, or normally would have sold, $1,000 or more of agricultural products during the reporting year.

The reason these figures are important is that we often wonder about why the public is opposed to spraying registered pesticides for insect control on agricultural crops or trapping beaver flooding crop or timberlands or any number of other wildlife damage problems affecting the production of food and fiber. The answer to that question is simple--"their ox is not being gored," they do not recognize that this damage has any impact on them. These 97.3% of the U.S. population have no apparent reason to be concerned, they have no recognized monetary investment in that crop, no labor, no pride, and no interest. So what! If that farmer loses this crop, someone else will provide the food that 97% plus of this country's population buy attractively packaged at the grocery store. Most children and many adults in this country today do not know nor care where food and fiber come from as long as it is attractively packaged and affordable. Their basic understanding is that meat comes in a styrofoam tray with a piece of plastic wrap over it. They are so far removed from the fact that an animal has to be killed to make this meat available, that even if someone tried to explain it to them, they would be embarrassed and probably repulsed if they were made aware of the fact. So what! The so what concern is that we have a continuing majority generation of people today raising future generations who will be even further removed and more easily misinformed by those who think in "cuddly quotients." They could care less if coyotes are putting sheep ranchers out of business or if geese are eating up the farmer's wheat or if rodents are defecating on corn that could have been used to make their cereal. "Their ox has not been gored."

To the majority of Americans who reside in metropolitan or urban areas, the worst pest they may come in contact with may be a house mouse; a skunk denning under the house; a flying squirrel in the attic; a woodpecker on the redwood shingles; or a mole in the lawn. In fact most of them espouse a sincere concern for wildlife while either purposely or ignorantly doing their best to avoid providing habitat for wildlife. To the much smaller minority of farmers, timberland owners or ranchers in rural areas, the vertebrate pests they come in contact with may be rats, beaver, groundhog, deer, rabbits, muskrats, fox, coyote, raccoons, prairie dogs, blackbirds, vultures, or a number of other species. Occasionally, these problems overlap, such as in the case with blackbirds which depredate on the farmer's crops during the day, and roost in great numbers in urban areas during the night causing significant damage in both areas. In any case, it is evident that when these wildlife pests cause enough damage, losses, health hazards, or other concerns, someone must help these people learn how to prevent or control the damage.

The urban dweller may be industrious and cunning enough to set a trap and kill the mouse in the house when they see one, or they may call a pest control operator to kill the mouse and effect control. An important question, however, is why did the urban dweller kill the mouse or pay to have it killed? Had the mouse caused significant economic losses, or great property damage, or presented a significant health hazard, or killed the family pet? Admittedly, this description of the urban dweller and the house mouse may have expanded the capability of the house mouse, but it does pose a serious question that most urban dwellers in the 97.3% of the American population have never considered.

Questions About Extension Wildlife Damage Control Programs

With this background of Cooperative Extension Service historical perspective, legislative authority and a statement of the very real problems faced today, I will now move to some questions I was asked to address. It should be understood that in trying to answer these questions, I will only scratch the surface and will interject only my opinion as follows:

(1) What about the effectiveness of Cooperative Extension Service in wildlife damage control? I know that extension educational programs in wildlife damage control can be effective. This is from personal experiences as well as from examination of the literature. This effectiveness is governed by a spectrum of factors with some or all influencing the results. Examples of factors: The specific wildlife species involved, e.g. bats; the availability of effective, practical tools that can be used by the clientele when educated; the magnitude of regulations involved; the cooperation of other agencies; the use of the delivery system; and last, but not least, the impact the damage is having on the clientele and the capability of the clientele to put into practice what they have learned.

(2) How can Cooperative Extension Services promote sound practices in wildlife damage control? By including wildlife management as an integral part of their total extension system, which includes seeing that professional wildlifers are employed in every state with wildlife damage a part of the program responsibilities, by including vertebrate wildlife in the integrated pest management program in each state, by providing for effective in-service training of county extension personnel, and by establishing lines of communication and cooperation with state wildlife agencies, other natural resources agencies, and regulatory agencies.

(3) What should the relationship between Extension programs and U.S. Fish and Wildlife Service operational programs be in wildlife damage control? The answer here is easy, it's the implementation that is difficult. The answer is "complementary." Ideally, with close cooperation, communication, and understanding, there should be a cooperative and coordinated wildlife damage control program between Extension and the Fish and Wildlife Service. The systems exist, are in place, and are functioning in some states--from cooperative planning to coordinated implementation. I strongly encourage and wholeheartedly support a complementary relationship with the Fish and Wildlife Service as well as with the respective state fish and wildlife and other natural resources agencies.

(4) Is there a need for increased emphasis in Extension for wildlife damage control educational programs? Yes, in a majority of the states. In

fact, I believe that the best chance we have to effectively educate clientele to deal with wildlife damage problems is through the Extension system. I also believe that these programs strengthen Extension's total program effectiveness.

(5) How can extension wildlife specialists avoid conflicts between agricultural producers and environmentalists? Although conflicts cannot be avoided, the magnitude and intensity of such conflicts can best be accommodated through factual education of both groups. It is not an easy task, but if not dealt with these conflicts can preclude wise management and may in fact affect other wildlife management programs. Extension specialists can often provide a liaison function.

(6) How can Extension complement rather than compete with private pest control operators? Through a variety of means, including improved communication, in-service training, reference services, and a clear understanding being developed of what Extension's role and responsibility is. One of the most effective means is again education, and as much as possible, develop and maintain cooperative efforts.

(7) Are there limitations of extension educational efforts because of inadequate research? Yes, and this goes back to the college curriculums in wildlife management, most of which are grossly deficient in educating students about wildlife damage. This lack of education tends to also create a gap in research being conducted on wildlife damage problems. Also, it is obvious that the research within government agencies, especially in recent years, in the area of wildlife damage research, is grossly inadequate, and for most practical purposes, non-existent. How can Extension interpret and disseminate new research, techniques, or methodologies if they are non-existent? This concern goes both ways, and I fear that Extension has failed in many cases to emphatically express, identify, and inform researchers of research needs in this area through the continuous identification process.

(8) What can Extension do to promote better public relations for wildlife damage control in the face of an increasingly urbanized society whose misinformation is largely based on emotionalism? We can redirect some of our educational programs toward the non-agricultural producer, the consumer, and do everything we can to convince the total extension delivery system to realize and objectively direct support and programs for this goal. This includes encouraging the Agriculture, Home Economics, Community Resource Development, and 4-H programs that wildlife damage control should be a part of their educational efforts. We also can continue to reinforce our efforts at cooperative and coordinated educational programs with other state natural resources agencies, organizations, and groups. I strongly endorse meeting at every opportunity, and speaking objectively to any group who is opposed to, or ignorant of the need for wildlife damage control. Such groups may not be the most congenial audience to speak to, but if addressed objectively, they often become one of the most attentive, and can be educated. I also encourage a very close relationship with farm organizations, support and advisory groups.

As I stated at the beginning of this attempt to address these questions, the answers are far from complete, but are pertinent to extension efforts in wildlife damage control. I hope it is apparent that even though I am a firm believer in extension programs, I do not mean to imply that Extension has all the answers or can control all wildlife damage problems. We can help and our

efforts are dependent on, supportive of and complementary to research, operational and service programs. With tighter budgets, increasing problems and less tools to work with the time could never be better for increased cooperation and coordination.

SUMMARY

I sincerely appreciate the opportunity to participate in this Fifth Great Plains Wildlife Damage Control Workshop, and am looking forward to others in the future, but let me move toward winding up this address by stating some concerns.

I believe it is imperative that researchers, in the future, look beyond the traditional approaches to wildlife damage assessment. Using some figures from a paper given by Wade (1981), based on 1980 livestock prices, the 4.0% of lambs plus 1.5% of the ewes plus 0.4% (1977 average loss figures) losses to coyotes in the western States would add cost to the consumers from $200 to $400 million per year. Quoting again from Wade (1981), "one of the disadvantages of 'average' loss data is that such data does not adequately describe real conditions since losses are not equally distributed across the livestock industry. Losses which jeopardize economic survival of individual producers occur to some producers, some suffer losses they can survive, and some sustain no losses. However, those who cannot survive, terminate their operations and provide no further data, just as occurs in any other enterprise." This type of loss to some producers occurs in crop production, as well.

We must increase research to obtain better prevention and control tools and techniques to remain effective in helping people solve wildlife damage problems. We must continue ongoing efforts and expand, where possible, effective wildlife damage prevention and control efforts even in the face of budget cuts.

We must provide increased educational programs to educate over 97% of the populace about the real need for wildlife damage control. Most of these people have not had their property, their paychecks, their family well-being, or their health threatened by wildlife damage problems, but they still need to understand the real life fact about the significance of such programs. Although I am saddened by the reports, there are recent newspaper accounts of children killed by raccoons and coyotes. We must do a better job, and we must help people understand that wildlife species must be managed, and that wildlife is not as depicted on T.V. which is always the "Gentle Ben" or "Animals, Animals, Animals" situation, the "cuddly quotient".

I want to take this opportunity to congratulate those responsible for the establishment and continuation of this Great Plains Wildlife Damage Control Workshop. This workshop provides a forum for professionals concerned, interested, and involved in this phase of wildlife management, to: examine the status of the work; review what's presented here and update ourselves on new and innovative techniques and methodologies; evaluate the controversies surrounding the work and to try to put into a reasonable perspective of how we proceed from here; inform knowledgeable policymakers in research, education, management, and regulatory agencies that wildlife damage control is a problem that must be dealt with biologically, not in an emotional "cuddly quotients" manner dictated by animal rights enthusiasts; provide the needed opportunity for local, county, state, regional, and federal representation of professional

researchers, teachers, extension workers, administrators, and managers to get together to objectively examine where we are all coming from with respect to trying to solve problems; and finally, to recognize that we all have a responsibility to work toward educating the people of this nation that wildlife damage control is a necessity.

I hope we can all attend and participate in this workshop with an objective attitude. I remind you that we've all been dipped and vaccinated; let's participate enthusiastically, and cooperatively, during this workshop. Following this workshop, let's leave here with a broader perspective, a greater appreciation and understanding, and a concurrent objective to--maintain the biological integrity of wildlife damage control as a vital part of management and to encourage, support, and implement increased educational programs in this field. Hopefully, this will remain an objective in all of our agencies, institutions, and organizations. We all have a responsibility, and it is a monumental task. Thank you.

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