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CHEMICAL BIRD CONTROL: IDEALISM AND REALITY

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Budding wildlife biologists, whether they wind up in research, management or administration, start out with one attribute in common. They are idealists. It is idealism to be sure, that quickly becomes tempered, if not blunted, by the realities of working for worthwhile, even essential conservation goals in an indifferent and frequently hostile environment. For some, the conflict of ideals vs reality is too much and they move on to other, probably more lucrative occupations. Still others, blessedly few in number, lose their ideals completely, become apathetic toward wildlife goals and devolve into that most pitiable of human specimens, the bureaucratic drone. Most of us, however, become inured though never wholly reconciled to frustrating reality and continue to work for the perpetuation and improvement of the wildlife resource.

What have these homilies to do with chemical bird control? Simply that in the course of intensive, multifaceted effort to find a solution, or solutions to the bird control problem we wildlifers have tended to overlook a harsh reality. Our approach to the problem, while eminently practical in methodology, is largely idealistic in nature. We have been assigned a vexing problem, that of bird depredations on agricultural production. Qualified personnel have been selected, still others have elected, to work on the problem. Theirs is both opportunity and challenge; opportunity to provide relief to agriculture and challenge to do so without damage to the basic wildlife resource. Theirs is possibly the most difficult assignment in wildlife conservation today. When they succeed, they will deserve high praise and plaudits. So much for idealism, now on to some realities!

I grant that there are realities aplenty in bird control and that most are recognized as such. There is the reality of significant bird damage to corn, rice, sunflowers, fruit and other crops. There is the reality of farmers, individually and collectively, petitioning Congress for help, a movement that resulted in a greatly expanded program in pest bird research and management.

The harshest reality of all, in my view, is the fact that there are extant in the marketplace today a number of chemical tools which, if applied diligently at roosts and other habitats, could alleviate and possibly eliminate bird depredation problems in short order. Let's tick off a few: endrin, parathion, phorate, TEPP and fenthion. We could extend the list to great length but there is no need. The point is that there are many readily available pesticides that are highly toxic

to bird life. If applied to birds, or bird habitat in sufficient concentrations, spectacular decimation would result.

It is quite true that none of the pesticide examples listed, or the dozens more we could have listed, is registered for bird control. Nor are they likely to be registered for any but the most restrictive of bird control uses, if at all. Further, if we were to poll the representatives assembled at this Seminar of the chemical industry, pest control industry, and wildlife conservation agencies, I believe we would find near consensus that the use or recommendations for use of these broad-spectrum insecticides in operational bird control would be ecologically unconscionable.

If we agree that applications of insecticides at bird control rates could result in significant damage to non-target species and to the environment, why belabor the subject? Obviously, neither we here nor our counterparts around the country intend to engage in practices that not only are biologically unsound but are of dubious legality to boot. The answer is that these insecticides, unregistered for bird control, are nonetheless being used to eliminate "pest" birds. Thus far, most of these incidents have been relatively minor brush fires that have failed to spark into a major cause celebre. We've been lucky. But how long will it last?

Let us assume that the patience of a long-suffering corn grower, or more likely a group of such, reaches the breaking point. They assemble spray equipment and highly toxic pesticide and thoroughly saturate a known or suspected blackbird roost or breeding area. Let us assume further that in addition to whatever blackbirds are destroyed, there is a concomitant conspicuous loss of shore birds or pheasants or quail or doves or song birds, or some of each. Whether the actions of the participants were motivated by desperation alone or by desperation augmented by ignorance or indifference will be immaterial once the result becomes known. The hue and cry will be on. *Silent Spring* will once more occupy center stage.

It has been six years since Miss Carson's book blew the lid from a seething pesticides cauldron. Reason gradually supplanted recrimination and the past few years have witnessed many notable advances in pesticides. Government agencies on all levels now communicate and cooperate with each other and with industry, many public and private pesticides misuses have been corrected, registrations have been tightened, and new products and product uses have been developed that provide greater safety for nontarget values. Probably none of us in pesticides work is wholly satisfied with results but at least we are working together and making progress.

However, it would be naive to imagine that all is reason and compromise in pesticides affairs. There are unreconstructed elements among both opponents and proponents of pesticides. Illogical and intemperate attacks emanate periodically from both camps. Among the opponents of pesticides we find many shades of opinion ranging from legitimate concern to "show me," to outright vociferous opposition to the application of any and all chemicals, fertilizers included, to the land. It is from the latter group that the new storm of controversy most likely would erupt.

Silent Spring was an unabashed and highly successful appeal to the emotions. It succeeded in arousing public concern for actual and potential dangers of unbridled pesticides use where scores of more scholarly and more scientific writings failed. Emotionalism remains the hallmark of public reaction to pesticides questions today, as some of us have learned the hard way. I am not critical of emotionalism per se. Without it, the modest advances in conservation during the past 75 years would have been impossible. But emotionalism that abjures reason, facts, and even common sense is more apt to be a destructive than a constructive force. When or if, we find ourselves caught up in another round of pesticides controversy, the loudest and most insistent voices undoubtedly will be those of the emotional extremists.

Consider the consequences of a pesticides battle triggered by our hypothetical, but all too probable, example of the bird kills. Our Federal and State wildlife law enforcement agents might make a court case against the perpetrators of the deeds, but this is by no means certain in today's social climate. Further, a successful prosecution for flagrant misuse of pesticides actually would have little relevance in the controversy. It will be the chemicals, and not those who misuse chemicals, that will be the focus of dispute. The cries of "I told you so" will attract support and adherents from otherwise more reasonable but concerned segments of the population. The clamor and pressure for restrictive legislation against pesticides and pesticides uses may be nigh well irresistible.

We can only speculate as to the form and effect of restrictive pesticides legislation and regulation that might be the result of hysterical controversy. It is improbable that the inevitable demand for mass outlawing of pesticides could be realized. Our economic dependence on pesticides has long since passed the point of no return. We and our descendants may well rue the day that we chose the expediency of chemical manipulation of our ecosystems over sensible human population control, but this is another story. For now, we face the prospect that ecologically legitimate and essential pesticides and pesticides uses may be restricted or eliminated with nothing to take up the slack. An even worse consequence could be that research and field testing of safer, more selective pesticides and pesticides uses might be curtailed. Ironically, ill-advised restrictions on pesticides would fall most heavily on those most directly dependent on them—the farmers.

Admittedly, there is much room for improvement in existing pesticides practices. There is a vast gray area of liability for pesticides damage to non-target values, especially fish and wildlife. There is the problem of continued wide-scale application of pesticides capable of causing environmental contamination when less damaging substitutes are available. If legislation is necessary to effect needed changes, so be it! But let it be legislation based on careful analysis of fact and scientific principle, not rampant emotionalism.

I realize that I paint a rather dismal picture of future prospects for those involved in chemical pest bird control. I would be happy to be proven a poor prognosticator but events in Michigan and other areas during the past year or so portend hectic times ahead in pesticides. I fear we are on borrowed time.

Are there steps that can be taken to forestall a recurrence of the worst aspects of the *Silent Spring* controversy? Hopefully, yes. Obviously the answer lies in persuading those who contemplate do-it-yourself bird control to cool it, to borrow a phrase from my teeny bopper daughters. It is asking a lot of a farmer to exercise restraint as his fruit or corn crop disappears into bottomless avian maws but he must be made to realize that the alternatives could be far worse. And let's not overlook feed lot operators and municipalities. There have been some bird control programs in these quarters that could not pass a test of ecological ethics.

Our best approach to the farmer is still the Agricultural Extension Service, especially the County Agent. The County Agents have done yeoman service in promoting safe pesticides practices and they could play a further key role in averting unauthorized and unwise bird control efforts. State game protectors are another group having close contacts with farmers and others who might be tempted to bypass propriety in bird control. Pest control operators often are in a good position to counsel feed lot operators, municipal officials and urban dwellers. Finally, editors of chemical and agricultural trade magazines would be well advised, when discussing bird depredation problems, to temper indignation with circumspection. For example, attacks on the legal foundation of bird conservation, the Migratory Bird Treaty Act, are not calculated to enlist support among private conservation groups where support, or at least sympathetic understanding is worth much to proponents of chemical pest control.

While forbearance among pesticides user groups is our most pressing educational problem, it is far from being the only one. What about understanding in the ranks of those who likely would be opponents of pesticides if controversy erupts? What effort is being made, or should be made, to apprise urban dwellers of bird depredation problems? This is undoubtedly the most difficult, but potentially productive, educational task we face. It is difficult because it requires massive re-education. For generations we have worked to develop public appreciation and love of nature. We have been fairly successful in this endeavor but by the same token, we have failed miserably to instill an even rudimentary understanding of ecology—of population dynamics and species interrelationships. Instead, by design and by default we have fostered public belief in the simplistic and grossly erroneous "balance of nature" concept. Like the buck law, it has been easier to sell this concept to the public than to unsell it. But unsell it we must if we expect public support for mass population control of pest bird species, especially by pesticides.

The prognosis for development and acceptance of operational bird control chemicals is not good, but neither is it hopeless. Time, not technology, is against us. The answers and the tools for solving problems of pest bird management are forthcoming. But like the cavalry in the Saturday matinee, will they arrive in time? With the right kinds of effort on our part, plus a whale of a lot of luck, idealism may yet prevail.

DISCUSSION:

MITTERLING: I see continually where we put the shoe on the farmer's foot for this bird depredation problem, and I think a lot of it really goes back to what you said about reeducating the public. A 16t of our urban citizens need to know that the balance of nature and the ecosystem concept is important in the bird depredations problem.

ELDER: I stress this because, after all, this is where the balance of power is in Congress and the legislature today, isn't it? The balance of power today is with the urban dwellers, not with the farmers. This is where the understanding has to be if we expect any proper legislative action.