

## WHAT LIES AHEAD IN WILDLIFE CONSERVATION

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**Abstract:** Public enthusiasm about ecology and preserving the natural environment offers the wildlife profession an unparalleled opportunity to advance conservation programs. The profession is urged to take a position of national leadership.

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I think most of us are a little staggered by the sudden deluge of public enthusiasm about ecology and preserving the natural environment. For my part, after spending 30 odd years trying to sell these ideas bit by bit, I am both pleased and just a little frightened by the ungoverned tide of acceptance that is engulfing us. Is this public reaction just a passing fad? Or is it here to stay? Can we direct this energy into constructive channels and make some real headway toward environmental management? Or will the groundswell vaporize into a mist of confused programs with ephemeral objectives?

This morning I would like to utilize the time allotted to me to consider some of these questions, with specific reference to the wildlife-fisheries professions.

Let me start out by stating that I feel we have some real muscle pulling in our direction. It is not all bluff and show. If we are quick to seize leadership and aggressive in pursuing our objectives, I feel confident that a great deal can be accomplished in the near future. Much of the conservation headway achieved in this country came during two previous waves of public enthusiasm, comparable perhaps to the present one. These were, the eras of Theodore Roosevelt (1904-12 roughly) and of Franklin D. Roosevelt (1932-40). The present wave differs from the earlier ones in that it is not traceable to a single leader, unless perhaps its origin stemmed in part from the recent administration of Stewart Udall in Interior. This wave seems to have sprung up spontaneously among many different groups, ranging from campus radicals on the one extreme to Richard Nixon on the other -- and that, gentlemen, is the whole enchilada! Be that as it may, our duty as conservationists is to make the most of it. We are dedicated to the preservation and wise use of resources. Here's our chance to cut a real swath. The question is how best to do it. What sorts of programs should we

push? What should our posture be?

I propose to answer these questions with three postulates, or concepts. One of these is a "get tough -- push hard" approach to some of the legal and fiscal aspects of conservation. The other two are just the opposite -- "low key -- soft sell -- infiltrate" approaches which emphasize the spread of ideas rather than the proliferation of conservation by force. Let's take these in order, the "get tough" approach first.

1. Stronger conservation laws and regulations. A strong swing of public interest means a strong swing of voting power. We would be derelict if we did not capitalize on this political advantage which is before us today. I would propose that our administrative departments and bureaus team up with the conservation organizations and agree on certain legislative measures that should be advanced with every bit of energy we can muster. High on the list should be some really effective pollution laws concerning contamination of water, of air, and of soil with effluents, toxic chemicals, and other destructive products of civilization. Likewise, this is the time to devise and adopt reasonable legal controls over hard pesticides. It is not simply a matter of banning DDT. As many of you know far better than I, the regulations on pesticides must be drawn with great care and judgement to bring about effective protection of wildlife without serious loss to agricultural production. For the first time I think we have the political strength to put our ideas into force of law.

Many sound conservation programs have been puttering along for lack of funds. Now is a good time to stir the legislative kettle for support of projects such as land acquisition and development, sewage disposal facilities, construction of water management controls in waterfowl areas, and other capital investments. Similarly, action programs in such fields as conservation education, extension wildlife management, conservation and management of rare and endangered species, and of non-game generally might find fund support now from general tax revenues or sources other than license fees.

Weak and inadequate laws or administrative rules could now be shored up to provide additional safeguards for parks, state and national forests, and public domain lands whose significance for recreation is skyrocketing. I allude particularly to the permissive mining laws and unrealistic grazing rights on public lands.

This might even be the time to challenge existing legislation that defies all the bounds of ecological common sense, such as the California Water Plan. I have never accepted that plan as being in the public interest, and I see no reason to accept it now. A few legislators are asking for reassessment. Let us give them every bit of help and encouragement consistent with our professional assignments.

In some of these ways I feel we must be bold, demanding, and persistent. We have much to win.

2. Projecting conservation thinking. Now some of our antagonists of past battles are coming to conservationists for help and advice. Among them are many of our worst polluters of the environment. Presumably they see the handwriting on the wall and are wisely following the maxim "If you can't beat 'em, join 'em." I would suggest by all means that we accept these invitations graciously, offer our help and advice generously, and proceed to plant the seeds of conservation thinking where they may do the most good. Let me give you some examples.

Major power companies and public utilities have long been at odds with conservation interests in such matters as locating power plants, building dams, and flooding valleys. In the past year or two PG&E has organized a committee of prominent conservationists which I understand meets regularly with company officials to plan future facilities with minimum environmental damage. East Bay Municipal Utility District has a similar advisory board concerning land use policies, with emphasis on developing recreational possibilities. The mere act of seeking advice does not make the problems go away. But it assures that the problems will be recognized at an early stage of planning and avoided if possible.

Champion Paper Co. purchased an enormous block of timber from the Tongass National Forest in southern Alaska (8.7 billion board feet) and set up a board of consultants to help locate the mill site and develop operational plans. I am on that board, and I must say I am impressed with the sincerity of the company and their apparent determination to follow our advice in minimizing the probabilities of environmental damage. Millions of trees are still going to be cut and millions of gallons of effluent will have to be treated and discharged to the sea. But the adverse impact undoubtedly will be lessened by advance consideration of the needs of salmon, bears, deer and moose, and of the sights and smells that will greet visiting recreationists who come to Alaska to see wild country.

In institutions of higher learning we have an unparalleled opportunity to influence the thinking of professional men in their formative years. Foresters have very often been trained to think in terms of logs and board feet, with scant attention to other land values. I know this to be true because that was the kind of forestry training I received at Yale. Now the forestry schools at Berkeley, Yale, and virtually all others are shifting emphasis rapidly away from sawdust orientation to wildland management in the broad sense. Future foresters should have a much more real appreciation of wildlife, fisheries, and recreational values than was the case in the past.

Civil engineers who build dams and highways and subdivisions are suddenly being made aware of ecological problems. At Berkeley, a course in Ecology is being offered this year in the College of Engineering. Other universities are taking similar steps to build into the minds of budding engineers that concept that the structure they build may have adverse effects on other values. I do not mean to imply that engineers will stop building structures. But they will at least have an awareness of related problems.

To sum up this point, let us infiltrate our thinking into the camps of our erstwhile opponents in every way we can.

3. Expanding our own concepts. By the same token, we must be receptive to new ideas and broader concepts. Wildlife and fisheries biologists can be narrow in their thinking, just as foresters and engineers.

For one thing, I feel there is still a strong tendency in our profession to be hung up on game species that produce a yield, rather than to focus on whole ecosystems, of which game species are only a part. Here in California we made inroads into this concept in preparing the California Wildlife Plan which puts heavy influence on non-game as well as game species. But there remains the residual prejudice toward those animals sought by sportsmen.

We are influenced of course by the fact that our operating funds and our very salaries derive from hunting and fishing licenses and from taxes on sporting equipment. This system of financing in point of fact automatically limits our thinking about the wildlife profession. I feel we must break out of these constraints if we are to assure leadership in the broad field of environmental conservation.

The enormous public interest in a clean and attractive environment is by no means limited to hunters and fishermen, though surely they are all included. The public clamor relates to blue water, fresh air, pretty landscapes well stocked with twittering songbirds, wilderness areas where the crowds can be left behind. Hunting and fishing opportunities fit well and naturally into this scene. But they are not of themselves the scene.

The job of environmental conservation cannot possibly be financed by the contributions from hunters and fishermen. Therefore, a greatly expanded system of finance must be devised if we are to lead the multitudes to the land of milk and honey. The first step that must be taken is to reorient the thinking of wildlife agencies and organizations toward this bigger job. I am constantly astonished at how much resistance there is -- especially in state game and fish departments -- to emerging from the security of living on earmarked license funds. The rough and tumble of obtaining finance from legislative channels is uninviting. But either we expand our functions under some form of general tax support or I fear new agencies will be created to assume the job. I suggest that we begin actively exploring sources of funds -- both state and federal -- to permit the existing wildlife and fishery agencies to expand into general environmental conservation.

To illustrate this point, let us examine the relationship between urban masses (75% of the people) and fish and wildlife agencies. Generally speaking, there is none. Those people who have automobiles and who choose to go afield may become license buyers and hence patrons of the fish and game department. But to the vast majority there is no connection. The underprivileged in the city would profit greatly by contact with the out-of-doors and participation in field sports. Facilities for fishing, made available to urban dwellers, might contribute in a substantial way to resolving social problems. On this basis it could be argued that the Berkeley Pier project may have been one of the most important investments of the Wildlife Conservation Board. Waterfowl refuges established in cities like

Oakland, Washington, and Detroit expose millions of people to the pleasures of seeing wild birds in urban surroundings. Shorebird habitats might be even more effective and appealing. Marked nature trails in refuge areas could serve a wide spectrum of educational interests. General assistance to landowners, and even householders, in managing songbirds and other non-game forms of wildlife, would be a widely welcomed extension of the wildlife profession.

To conclude this point, I am saying merely that we must be prepared to expand our own thinking as well as impose our ideas of conservation on the public.

In the 1970's we may have the opportunity of a lifetime to advance conservation precepts and conservation practice. We will fall short of success if we approach this era thinking in terms of limited objectives and the security of past programs.

Why don't we start out with the concept that we are the national leaders in conservation thought and that we want to remain in the forefront.