

state, and they're legal. They're baited with a mixture of natural beauty, Southern hospitality, a wonderful climate and lots of fun things to do.

If you find yourselves caught in one of these nets, don't fight it. Just enjoy it to the fullest for as long as you can. When you've stayed as long as your time will allow, you will be released unharmed, and richer for your experience.

Thank you.

## **"THE GENERATION GAP IN ENVIRONMENTAL COMMUNICATIONS — AS SEEN FROM GOVERNMENT"**

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I would like to address my comments this afternoon not specifically to any generation gap in conservation education or environmental communication, but rather to what the various resource agencies are doing or are not doing in the area of communicating to young people.

All of you can remember this past spring on April 22, to the Earth Day activities. In the Southeastern Region, our Bureau staff personnel participated in 61 separate programs at universities, high schools, junior high schools, and elementary schools. We contacted more than 21,000 young people, or more properly stated, 21,000 young people contacted us. I know that many of you in this room participated in this well publicized one-day or one-week environmental communications bonanza. Many of us carried the environmental quality message to literally thousands of people at one time.

The mass communications were wide open to any program that the young people in the colleges and universities were doing on Earth Day. Every newspaper, every television station, every radio station carried the message on April 22.

But what happened on April 23? April 24? April 25? or June 22? The problem with resource agencies in such a well developed well publicized program is the inability to follow up. Here we had a vast audience. We had people interested. At the college where I participated in the Earth Day activities, the students spent the whole morning in very useful busy work — cleaning up highways, doing filthy work along the highways and byways around Macon Junior College. In the afternoon they listened patiently to "learned" speakers discuss with them environmental problems. I talking to them about the rare and endangered species program and the need to maintain quality environment for endangered species and other species of wildlife. We talked about wildlife as species indicators to the quality of the environment in which man as well as wildlife must live.

There was virtually no followup. The resource agencies did not have the manpower to keep the momentum going while we had the attention of the young people of virtually the entire United States. I and E technical and administrative people combined cannot personally reach very many people because of our limited number and limited funds. To overcome this we must multiply our efforts through training personnel who can carry the message to young people — the personnel who contact them daily. This is the teacher in the elementary and secondary school. Here in Georgia, two conservation education workshops were developed about four years ago. Virtually every State in the southeastern United States has some type of conservation education workshop for teachers, either in their university or in summer camp sponsored by resource agencies.

Let's not kid ourselves into thinking that this is a new program. For the past nineteen years I have worked with a conservation education workshop for teachers in Tennessee. This program was started in 1938 by James L. Bailey at Norris, Tennessee. The workshop is still in progress and, along with several others, trains many teachers each year in the Tennessee educational system. But the history of conservation education workshops goes far beyond this. In 1903, at the University of Tennessee, it was thought that it would be a good idea to teach teachers how to teach conservation. Resource people from various parts of the country were called in to participate. Such names as T. Gilbert Pearson, C. Hart Merriam, Liberty Hyde Bailey, and others were brought in. There was some concern that perhaps there would not be a justifiable response from the teachers to attend such a workshop. The people who conceived this idea were overwhelmed by nearly 2,500 teachers who came to this very early conservation education workshop for teachers which became the reknowned University of Tennessee "Summer School of the South."

I mentioned the two conservation education workshops in Georgia just a moment ago. Every effort was put forth to announce the quality and availability of this course. We had to scrounge to get 25 teachers to attend each one of these workshops and each of the teachers was given a scholarship to attend.

I maintain that we do not have a generation gap in that we are not able to speak to young people. I contend that we have a responsibility gap — a gap in which the older people are not willing to recognize the fact that there must be a greater energy placed in conservation education or environmental communication before we are able to carry out meaningful programs for young people.

Every State in the Southeast has paid lip service to the need for I and E work. Our own Bureau has paid lip service for a number of years to the need for good conservation education in its I and E effort. The token effort, both in personnel and funds which is allocated to conservation education, demonstrates the interest shown by administration.

In the Bureau of Sport Fisheries and Wildlife we recently carried out an urban fishing program. We were able to get the attention of young people from the inner city — young people who had never seen anything alive other than a rat or a cat and were afraid of both. These people were bussed, through the efforts of the Atlanta Parks Department, to the Atlanta General Depot, where a pond is managed by our Fishery Services biologists and Hatchery personnel. The pond was so heavily stocked with fish that almost every child caught at least one fish. They came and were exposed to the out-of-doors for the first time. Many of them who caught fish were actually afraid of the fish because it was alive. One youngster even tried to stomp the fish to death as quickly as possible. He was afraid of it. This is a youngster 14 years old. After talking to him and explaining to him what a fish was, he was quite enthused and willing to do everything he could to catch another fish and actually began to enjoy fishing.

But what happened to these youngsters after this one-time exposure? What was the followup now that we had their attention? We have been able to do virtually nothing to follow up on this contact once we had the attention of both the Parks Department, who had the contact with the inner city people, or with the young people who came out. And why didn't we do it? Not because there wasn't a desire, but because there was an almost complete lack of both funds and personnel to carry out a meaningful follow-up program.

Both State and Federal resource agencies have pamphlet programs. Many of these programs are fair. Most of them are sadly lacking in quality and quantity. But how do we reach young people with the printed word? Ed Dodd, the creator of "Mark Trail", has done this very admirably. He is able to talk to young people through "Mark Trail". This comic strip reaches hundreds of thousands of people at one time and carries many conservation and environmental issues to the people. Ed Dodd and Tom Hill's Sunday page, which

treats natural history subjects, provides other thousands of people with information they would not attempt to get in any other way than through the comic pages. Ed Dodd weaves into these strips excellent resource use information. It is up to the resource agencies to provide him with good technical data so that he can talk for us.

As I stated before, I do not feel that there is a real generation gap in environmental communication, I feel that there is one very serious problem and a serious gap which exists between the technical-administrative groups and the I and E group. What I am talking about here is the definition and agreement on our audience. Are we still talking entirely to that small percentage of hunters who can only remember a 10-duck bag limit and are not satisfied with less, or are we talking to the modern day youngster who gets a great thrill from shooting two mallards and finds this a very satisfying outdoor recreational experience?

Dr. Glasgow just mentioned the need for thinking about species other than game species. I have an 11-year old who is a better shotgun shot than his dad — that is on clay pigeons. When we float a river for ducks, he is almost afraid that a duck will fly up when it's his turn to shoot. He wants to go duck hunting, but he doesn't want to kill a duck. Why? I think it is, in part, the effect of the exposure he has had to a new way of looking at life and a new approach to enjoying the out-of-doors.

We in the fish and wildlife field should never underestimate the value of wildlife species for activities other than hunting. Many thousands of young people today are just as thrilled over seeing wildlife, photographing wildlife, or walking in an area where wildlife exists as they are in actually shooting wildlife.

This is by no means to say that I, personally, am against hunting — I am not. I am very fond of hunting and find great satisfaction in it. My child enjoys hunting. His friends who go with us enjoy hunting, but there is a different attitude toward hunting.

The gap that I see is not a generation gap — it's a responsibility gap. We older people have not demonstrated proper responsibility in resource management.

The generation born during and since World War II has watched us over-exploit virtually every resource we have. They have watched us kill the goose that laid the golden egg as it were. We talk about environmental quality and continue to produce the trash at an unbelievable rate. We talk about wise use and practice monocultures in agriculture to the extent that expensive and drastic control measures are needed for almost every crop we grow from pine to pimentos. How can we expect our children to believe or understand us when we speak and act with such contradictory nonsense?

Lonnie L. Williamson, *Editor*  
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It is the opinion of many that a "generation gap" does exist today within the field of conservation communications and I tend to agree. Not only is there abundant evidence of communications deficiencies between communicators and the younger age groups, the same situation exists to a deplorable extent with the overall public realm.

Our society is constantly changing. This change has been relatively slow over the years but the total result is significant. Today, our population is 70% urban. Twenty-eight percent of the nation's population live in cities of 100,000 or more. One-third of the nation's population resides in a megalopolis which stretches from Massachusetts to northern Virginia. The population is shifting and its

attitudes and personalities are shifting with it. This means that the potential audience for conservation communications is changing. It is becoming more urban and because of the nation's population growth, it is becoming younger. Around 30 percent of the people in the United States today are less than 30 years old. The public is getting younger and increasingly urban, while many wildlife agencies and their communication efforts are maintaining the status quo, and thus, are getting older. Most wildlife agencies today remain rurally oriented institutions attempting to serve a predominately urban-oriented society.

The new generation of urbanite is not as familiar with the facts of life concerning animal and plant ecology as was the once predominant rural resident. Only 3.4 percent of the large city population in this country are hunters. Yet non-hunters will undoubtedly have increasing and profound effects on policies and regulations in resource management. In spite of this, agencies, including their I & E Sections continue to cater to hunters and fishermen almost exclusively. The effect of this action is manifest in the growing anti-hunter movement in the country today. It is to the best interest of responsible agencies and of the hunting public that these citizens receive just consideration in the management of *their* wildlife resources also. These non-consumptive resource users are not being exposed adequately to present-day conservation communication efforts. And if they are reached, they are sometimes confronted with headlines which typically read "Deer Become Moving Targets As Hunting Season Opens." To a hunter, these are glorious words which stimulate rigorous anticipation for a relaxing and enjoyable hunt. But to a non-hunter, especially one with "preservationist" leanings, this is an affront which quickly counters any constructive information which a following story may contain.

The various state agency magazines remain a primary mode of communication between the state organization and its public. Yet, the combined circulation of all our state periodicals is less than that of one mass-circulated national magazine.

On the whole I & E publications are very entertaining and instructive. But, many miss the boat when it comes to really informing the people on vitally important issues. There can be good reasons given for this fault, involving such perennial drawbacks as understaffing and underfinancing. Many times, however, the basic problem of I & E departments is what one might call the old "political backlash" which is usually applied in the form of a budget cut.

There is a way to fight this so-called "backlash" and this is to forge ahead and make more people aware of the issues. Public awareness which conservation communications foster then is reflected in the political environment. Therefore, it is to the best interest of the resource and to the I & E sections and the entire agency to continually strive to keep the public informed and not just entertained.

Another point which is very important to any discussion of updating I & E departments is that of education. The information portion of the I & E designation can be justified, but as for adequate education, we're kidding ourselves and have been for a long time. There are many programs throughout the nation within I & E departments which educate the public to a certain extent. These programs are as varied as the age groups and interests of the people sought. The fact remains, however, that I & E personnel generally are not educators. They are not trained to educate and furthermore if they were, they are not in a position to do the job which needs to be done. Adequate conservation education will come only through the established educational institutions which are equipped and which have the *trained* teacher and the opportunity to get at the desired audience.

Going through the already established education route does not mean that I & E has no function in conservation education. To the contrary, they have a most vital role. Through their experience, they can define what is needed to accomplish that task. Secondly, they have the responsibility to stimulate educators and to supply them with information which they can use in educational programs.

There is a conservation communications gap, and it may have been created because many wildlife agencies have failed to evolve with society.

Sam Venable, Jr.  
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Let me begin by stating that in my opinion, the "generation gap" is not a failure to communicate between persons of different ages. There's a prime example of that in my family. I have two brothers, both of whom I am very fond. One is 19, the other 21.

The younger one is a long-haired hippie-type. The other is serving in an ammunition depot in Vietnam. There is only two years difference in those boys' ages, but they are 40 years apart in some of their beliefs.

In like manner, there's a gap between persons in the field of conservation and the public at large. But it's an all-aged gap. It involves old mountain men with long flowing beards as well as college freshmen with blond stubble. It encompasses 85-year-old women who no longer have need of a bra as well as college coeds who simply don't want to wear one.

As I'm sure you know, the public is more aware than ever before of the impending ecological disaster which our country is facing. And it's largely due to YOUR efforts that they have this knowledge. But that's where the ball has stopped. You haven't gone the second mile.

Let me cite a couple of examples. Last summer, my newspaper broke the news that mercury existed in dangerously high quantities in many TVA lakes. During my research, I received much help (some "under the counter") from representatives of the Tennessee Game and Fish Commission.

But after the story broke, the commission released an intra-agency memo telling its staff how to deal with the public when discussing mercury pollution. The memo included statements which called The News-Sentinel's story a "scare" and said it caused a form of "hysteria." The commission has for years published scenes of fish kills on its fishing brochures. Under the picture are the words: "Don't let this happen to your fishing site. Fight water pollution." However, when the pollution was "fought," the Commission deemed it "hysteria."

Secondly, our state has a State Stream Pollution Control Board whose job it is to seek and prosecute parties which pollute Tennessee waters. That sounds real good on paper, but in actuality, it's pretty much of a farce since the board is highly representative of municipalities and industries.

For instance, the Olin Mathison Corp. of Saltville, Va., has been found to dump a discharge into the North Fork of the Holston River which causes the water to be "hard". In addition, the company has been blamed by the State Public Health Department with discharging mercury into the river, causing its closure to fishing. Twice this summer, the Board set up a show-cause hearing on Olin, and twice it was postponed. As far as I know, a third date has not yet been established.

And the people are asking WHY?

On the national level, the Tennessee Valley Authority seems to me to be an agency which claims to be working for the good of the environment, but whose actions seem to point the other way.

The TVA has recently formed a series of study groups to recheck its projects. It is reported that the ecology is being given every consideration before work is begun. Yet the TVA still persists in continuing with idiotic proposals such as the Tellico Dam project on the Little Tennessee River.

In its most recent magazine publication, TVA shows a picture of the bend in the river in Knoxville and notes that business flocks to the waterfronts. What

it fails to mention, however, is the fact that that water is so polluted a carp would have a rough time living in it.

This is the point I'm making gentlemen. The public is tired of a hypocritical, half-hearted efforts on the part of fish and wildlife agencies. They know the problems. Now they're looking for answers and solutions. Can you give it to them?

Now I realize I've been pretty harsh on many agencies. That's fine in my line of work. In my profession, the writer usually stands by and yells "FIRE, FIRE!!" at the top of his lungs. But he rarely gets into the bucket brigade line. That must change, too.

Admittedly, we outdoor writers have a good job. We're paid to hunt and fish and tell others about our luck. But we'd better start paying our way and bringing news of the environment before our readers. If not, we'll soon have nothing else to write about.

Dan Sherry  
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*Tennessee Game & Fish Commission*  
*Nashville, Tennessee*

In order for there to be a significant generation gap in environmental thinking, there must be a categorical difference of philosophy between age groups. There are indications that young people are generally more concerned with the problem than older generations. Modern education has emphasized the problem; it has been represented in student demonstrations, and the youth has expressed the desire for a new set of priorities in life which could insure environmental protection. However, I believe that whatever generation gap exists is not the primary dividing force. A recent poll showed older persons to have only slightly less concern than younger persons in the area of water pollution, for instance.

I believe that conflict of interests (primarily economic) are at the root of most of the division of thinking. There are few ways that activities which require alteration of the habitat such as industry, urbanization, and agriculture can have beneficial effects on the environment. With few exceptions, the very thought of any of these vital necessities, in fact human life itself, suggests at least some sacrifice on the part of the environment. With technology at its present level, the best that can be hoped for is a compromise. Unless one devotes his life to environmental work alone, he will most likely become involved in a line of work which, somewhere down the line, adversely affects the environment. If his work is far enough removed from the activities which most directly affect the environment, he may likely become sympathetic with the environmentalists. The closer his work takes him to direct environmental alteration, the less likely he is to be sympathetic to the cause.

Interest in the problem also varies with socio-economic classes. The extremely poor have demonstrated little interest in environmental problems because they feel it is a misplaced emphasis when they are living under deprived conditions themselves.

The economic approach not only applies to the lay person, but also to the governmental agencies associated with environmental protection. The state stream pollution control agencies must compromise the environment with its vested interest - industry; the agricultural agencies must sacrifice the environment for agricultural interests; TVA must sacrifice the environment to fulfill that portion of its justification for a dam concerning power generation and industrial development; and so forth.

Up to now, I have been basically discussing environmental thinking as it relates to economics. In one study, people living in cities having the most serious

pollution problems more often rated pollution a serious problem than those living in similar-sized cities with lesser pollution problems. This example suggests that persons furthest removed physically from the problem take the environment more for granted and express less concern for its ills.

I have so far proposed that a significant generation gap as such does not exist and that the actual gap in environmental thinking lies between those whose interests mesh with those of the environment, and those whose interests conflict. I will finally consider a few of the basic requirements I feel necessary for closing of this gap.

This responsibility lies primarily with the politicians and environmental control agencies. Until now at least, the question has been a political football - a vote-getter to talk about but not necessarily something to do about. For instance, one would have thought by the initial statements made by the Federal administration that hard pesticides were to have been completely eliminated - yet to date, only a few specific uses have been banned.

The selfish interests of some agencies point out vast inconsistencies in their policies. In Tennessee for instance, the Stream Pollution Control Board, the primary pollution control agency of the state, publicly opposed a proposed minor clarification of the Game and Fish pollution law, which was in no conflict whatsoever with their own, rarely used laws. Isn't it a bit odd that the Corps of Engineers on one hand diligently considers all interests when a potential polluter plans location in their jurisdiction; then, with consideration for no one, plans the ditching of one entire watershed after another for very questionable benefits to a very few people. These examples result in the environment suffering at the hands of a quest for glory and expansion by agencies set up to protect it.

The fact that the 1899 Federal Refuse Act is the best legal tool we now have for prosecuting pollution cases doesn't indicate our lawmakers have strengthened their views for pollution control much in the past 71 years. In fact, recent use of this act has prompted guidelines to be issued by the Justice Department severely *limiting* its use.

The Tennessee Solid Waste Division and the Strip Mine Reclamation Board which are set up to protect the environment, are little more than advisory boards completely without enforcement powers. The intentions of the lawmakers setting up these offices seems obvious - to convince the public that control agencies are being set up, but not to give them the power to effectively control the problems.

I'm sure many of you can recall examples in your states of a much stronger word than deed policy on environmental problems. To employ an overused cliché, this kind of policy leads us to more of a credibility gap between the government and *all* generations of the public. If compromises with the environment are proposed, the precise consequences need to be publicly stated so that the public can knowingly make a decision on which course they want to take.