

SUMMARY AND CONCLUSIONS

In a questionnaire survey of the presidents of larger Virginia sportsmen's clubs, preference and reasons for preference were obtained for sportsmen's magazines, articles, and writing styles.

A technique employing percentage of magazine volume in preferred article types was devised for preference rating magazines.

Further experimental use of the technique is recommended. Substitution of other state wildlife magazines can probably be made for *Virginia Wildlife* with little effect on the rating scale.

It is essential that the men and women of America know and practice the wise use of their resources. "Wise" use implies knowledge and this must be gained from reliable and readily available sources. The outdoor and conservation magazine is a popular, effective approach to many citizens. By channeling conservation principles and information through preferred types of articles and by making total magazine content more preferred, conservation educators can increase their effectiveness—both in number of people contacted and the changes caused in them by the contact. *Effectiveness of an attempt at conservation education is a product of the number of people contacted and the positive change that occurs in them as a result of the education.*

PROBLEMS OF CONSERVATION EDUCATION IN THE NEW AGE

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We who are working in the field of conservation education have many problems.

In analyzing the problems which are most pressing at the moment, we find that the majority of the serious ones are brought about by the new age in which we are now living.

These problems brought by our new age are, in fact, so large, so unusual, so ominous, that they envelop us. They are so all-pervading that we have difficulty in seeing them clearly and, indeed, we are not always conscious that such problems even exist.

Let's take a brief look at 11 or 12 of these problems:

Our population is exploding. We use tin-can communications. Our hook is unbaited—no modern sales-psychology. We should be cashing in on the glory of the rocket technicians. We use soft scattershot instead of selective penetration. We keep working in the past, instead of the future. Our public is on wheels. We hesitate to tell the truth. We are not preparing our people for 1965. We hug our responsibilities while refusing to wear the mantle of authority. Our little conservation crusade is overshadowed by international cold wars. We do not plan for the first zoo on the moon.

You remember the story about the man climbing up out of the ditch—for each step up, he slid two backward. And then a friend told him to turn around, and walk up backwards.

Our current population explosion is the ditch of our conservation education efforts in the new age. We often forget that more people are born each day than we can educate in that day.

The fact is that the United States, and, indeed, the entire world, is now involved in a great population explosion of a magnitude never before known in human history. Let us look at some of the net increases of population in the United States.

In the year 1900, we had slightly more than 76 million people in this country. In the next 25 years, by 1925, the population increased more than 50 percent to a total of nearly 116 million. Twenty-five years later, in 1950, our population

jumped another 36 million. Eighteen years from now, in 1975, we will be faced with a possible total population of over 220 million people in this country.

Let's narrow down the population figures for a closer look: In 1955, we had 165,271,000 people in the United States. During the year, we had a net increase of 2,820,000 people. This means that when we, the conservation education workers, quit work at 5:00 p. m., Friday for a weekend of much needed rest, the population in this country undergoes a net increase of 19,315 people before we return to work at 8:00 a. m., Monday.

Yes, we rest 63 hours over the weekend, and then come back to face another 19 thousand new people.

It's true, you know, that each morning when you sit down to breakfast, there are another 7,800 new faces at the national breakfast table.

How can conservation education possibly keep pace with this vast surging increase of population? We need new techniques, new methods of communications, new crusades, and new ideas. And we don't have them today.

Let us look at the population situation from another angle. In the year 1800, we had six people for every square mile in this country. In the next 50 years we only added 1.8 people per square mile; that is, in 1850, we had 7.9 people per square mile. In the next fifty years, the population concentration more than tripled to 25.6 people per square mile in 1900. Another fifty years, and the population doubled to 50.7 people per square mile in 1950.

In another 17 years from today, by 1975, we may have 75.6 people for every square mile in this country.

Now, our deer biologists say that a pretty good deer herd is based upon one deer for every twenty acres. Six hundred and forty acres in a square mile means that a good deer herd is based upon 32 deer per square mile. In 1975, we'll have 75 people per square mile.

We are in the midst of a great population explosion, and we had better face the cold facts. The population is increasing faster than we conservation educators can educate the new people. We are having trouble educating the old people, much less the new ones. While we are climbing up out of the ditch, we are sliding backward.

While our population is exploding, we keep using the same old-fashioned methods of conservation communications—methods that were based on much smaller population figures.

This brings us to a second problem—our tin-can communications. We have failed, in large part, to develop any new methods of sending conservation messages from the conservation agency to the people. Television, the most recent method of mass communications, has been under development since the 1930's. We have not as yet been able to figure out any method to fully utilize the vast potentials of television in our conservation education work on either a state or national level.

Many of us are still basing our conservation education work upon the ancient techniques of "press-agentry." We may call ourselves "educators" but our tactics are so often those crude tactics made famous by Barnum and his circus.

Could it be possible that our administrators—our directors and commissioners—are still suspicious of their information and education divisions? Do they suspect that we are using old-fashioned press-agent methods instead of modern sales psychology?

It is, indeed, possible that they do not even realize that they suspect us, but where is the full recognition of the capabilities of the education workers by their conservation administrators? Such full recognition seems slow in coming.

When private business administrators embark on new programs, they call upon their new-style public relations people—their hired magicians of the modern black arts of hidden persuasion. These private "magikers" are developing techniques for analyzing what people are thinking at the very moment when the people being analyzed don't even know that they *are* thinking.

By contrast, when conservation administrators confront a new problem, how many of us in the education field are properly prepared to suggest a solution based on modern methods?

Too often, the answer is: 1. We are so busy with publicity that we seldom have a chance to stop to analyze our people, our methods, or our results. 2. We are so occupied with red-tape office routine that we have lost contact with the public. 3. Conservation work is now so technical and so varied that it may be that no one person is competent to offer advice.

It would seem that there is an easy way for each of us to judge if we are basing our personal work efforts on modern techniques. If our administrators customarily make their decisions single-mindedly, and then tell us to go blow the horn and strike up the band—we can be certain that, so far as our administrators are concerned, we are nothing more than press-agents.

The fact is that we workers cannot properly call ourselves education workers so long as we remain only accomplices after the fact, rather than acting as advisory partners in the policy decisions.

So long as we keep insisting that our business is not helping decide the policy, but only selling the policy after it has been decided, we are press agents.

For, before you can educate the public, you must first be certain that the policy is wholly acceptable to the public, or failing that, that it can be sold to the public without repercussions.

We submit to you that formulation of such salable administrative policies must be based upon sales-psychology. And, if the education worker is not qualified in modern techniques, he is not able to assist the administrator in making proper policy decisions.

That is one of our problems—our failure to develop new techniques and so prove our capabilities to our administrators. Our administrators are not to blame; the responsibility rests squarely upon us—the workers in conservation education and information. If we can't even educate our administrators to our beliefs, how can we hope to educate the general public?

Our next problem is our failure to cash in on the glory of the rocket technicians.

We have the problem of keeping abreast of the swift growth of the over-all scientific mind of today's youngsters and their parents. Our people, whom we must inform and educate to conservation, are being well-versed in the marvels of science.

Yesterday was a world of mechanics.

Today is a world of technics—the technical details of launching a rocket to the stars. The technical details of modern medicine and the human body. The technical details of preparing for awesome war, and the technical details of preparing the defense of our civilians. Yes, on all sides, the technics and the techniques of modern chemistry, metallurgy, psychology, family life, salesmanship, and all the other signs of the new age.

Today, the technician has come into his own. Today, the technicians hold the glories that belonged to the machine mechanics of the 1930's, to the aviators of the 1920's, and to the inventors of the late 1800's.

We see the glory of the technicians all around us. Yet we in the wildlife conservation field are failing to cash in on it. In a sense, we keep comparing our biologists to the old-fashioned horse-and-buggy doctor, when we should be comparing them to the rocket technicians.

Truly, most of us are still trying to inform and educate the people to theories and facts that were obvious ten or twenty years ago. This is not to say that we are not doing a pretty good job in this. We are saying, "We started work on this in 1930 or 1940, and this is what we found out in 1950. Look here, we proved this 20 years ago in Missouri, or 30 years ago in Illinois."

And our people have their eyes on the mechanical moons, and the star rockets, and they are not listening to us too well.

Why aren't they listening?

Because we fail to tell them what we are doing today, and what we expect to prove in the future. We forget that our people of the new age have their ears and minds tuned to the future, and are impatient with the past.

Has one of us in the conservation field tried to tell our public the truths for today and the theories for tomorrow?

Have we, for instance, said:

"In a few years, our wildlife biologists may be able to compound chemicals to improve the physical condition of our deer and turkey. We may be able to aerial-spray chemical medicines and nutrients to vast acreages of land and vegetation to improve the health and food supply of your wild animals."

Has anyone said:

"Where doe deer are now producing one fawn a year, we may soon begin applying modern medical techniques and drugs so that the same doe produces healthy twins or triplets."

Has anyone said:

"Soon our wildlife technicians may use atomic or hydrogenic rays, to develop new mutations of fish and animals to produce new species of game."

Have we told our people:

"Our wildlife biologists are not interested solely in the life biology of a wild animal. They are really modern technicians. They are, almost, wildlife scientists. Our wildlife technicians are, or at least soon will be, applying modern techniques of management and development just as surely as the technicians at Cape Canaveral Missile Base."

No. If these things were true, we would hesitate to say them. We would be fearful of possible criticism or ridicule. We have an almost chronic fear of telling the people the truth on the weak excuse that they won't understand, won't accept it, or will rise up in concert to abolish us.

We hesitate to say to them "We think that the best way to improve fishing in this lake is to apply chemical poisons to totally kill out every fish in it. And then restock with good gamefish so that we can control the fish populations to produce maximum fishing."

Not only do we fear to tell them such truths, but we go on coddling them into believing that random fish re-stocking will improve fishing. Indiscriminate fish re-stocking is easier for the people to believe, so we take the easy way out. We restock fish, and because we, the authorities, do it, the people are encouraged to believe the untruth.

We fear to tell the people much of what we feel is the truth. And what we do reveal, we apply with the ancient blunderbuss of publicity broadsides where we should use, so to speak, the selective penetration power of a deer rifle. We are still aiming our conservation education weapons at the unknown mass audience, instead of selectively aiming our concentrated shots at one type of people.

"This is good for everybody," we say, while preparing the message. "Everyone must know this." But everyone isn't listening to us. We should be aiming at, perhaps, the young struggling business man with three children and a restless wife. Or at the retired couple with a yen to travel on their social security pension.

We persist in using the soft scattershot instead of the powerful penetration of a psychologically designed message. And our soft message is based on the old stale examples from the past instead of the possibilities of the new age.

We have, also, the continuous problem of a highly mobile public. The people of America live on wheels. In the 12 months between 1955 and 1956, over five million people moved permanently to another part of their state. At the same time, another five million moved permanently to another state altogether. It could have been that the people you spent so much time educating in Missouri moved to Florida before the year was over.

If you gave these mobile people the right idea in Missouri it helped us in Florida when they moved south. But, if you gave them the wrong message in Missouri, you made for us the difficult task of re-educating your exported people.

We deal today almost solely in shifting populations; a continuous mobility of the people that we have never before encountered. Even as we work, our population is constantly surging and shifting, with a consequent mixing of its ideas, philosophies, attitudes, and ways of life. This great mobility of our people is giving us a population mass that is becoming more and more free of the old

restricted views and local prejudices. Our people are becoming cosmopolitan, and we must anticipate this change.

You may remember the old circus advance-man. While the big show moved from town to town, the advance-man worked two weeks ahead of it; slapping up posters and giving away tickets for the show that would be here in the future.

We in conservation education must be the advance-men. We must always work ahead of the main show. We must capitalize upon the fact that we work always in a shifting climate of public opinion. We must remember that the people's opinions of our respective agency and its objectives is constantly changing. We must foresee and anticipate such changes, and work skillfully and cleverly to clear the road for the next shift of the big show.

And when the change takes place on our carefully prepared show-grounds, we cannot lean back to rest. We must be working far ahead, preparing for the next change.

We must realize, also, that such advance work is lonely. The truth is that the circus advance-man never did see the circus performance. He was too far ahead of the main show. But he did his job and he did it well. We must do the same.

Since our population is mobile and becoming more and more cosmopolitan, it is reasonable to assume that we people working in conservation education in all parts of the nation and on all levels of society would do well to band together and decide upon at least one basic truth that we could all hammer home to the combined publics of America. By thus educating our mobile publics to one thought we would help each other, and help ourselves most of all.

We have not done this as a cooperative effort, and this, too, remains one of our failures on a national scale.

It seems, also, that we are still occupied in trying to inform and educate our people to the theories and facts that were developed long ago. And we have no time left to prepare our people for 1965.

We occupy ourselves trying to reap the harvests from the seeds of conservation beliefs planted long ago, and we fail to plant new seeds for future harvests. We are not telling our people the resource facts that they will need to know in 1975 or the year 2000.

We wildlife workers are laboring with the emergencies and contingencies of the moment. We seldom stop to think of what the future holds for us wildlife workers, and how we may prepare for it.

Part of the trouble is that we, the conservation agencies and the employees, consistently refuse to recognize the basic premise that responsibility is always accompanied by authority. No one can be held responsible without being allowed to exercise the necessary authority.

We, in the conservation field, so often refuse to recognize that when the public presents to a state agency the complete responsibility for its fish, wildlife and natural resources, the public also automatically bestows upon the agency the authority needed to manage, restore and conserve.

We recognize clearly that the public holds us responsible for its natural resources. We so often refuse to believe that the people want, or will allow, us to exercise the necessary authority.

In place of exercising the authority needed to carry out our responsibilities, we keep running back to the people, asking, "Can we do this. Should we do that. Will you let us do this." And the public becomes bored with us.

Yes, we hold dearly our responsibility but we hesitate to assume the mantle of authority that accompanies it. We imagine that the public will strike us down if we even pretend to act and talk as authorities.

The public, my friends, is not so simple-minded as we graph it out to be. The mass mind is not still in the fourth grade, as our frenetic and ulcerous brothers in the commercial advertising trade would have us believe.

Truthfully, we, the conservation workers, cannot convince ourselves that the great silent public, that majority public that never assaults us, believes everything that we, the conservation agencies, say, simply because we are the con-

ervation agencies. And yet it is true; the conservation agency, merely because it is the recognized agency, speaks always with authority.

It seems as if we—the workers—remember only that each of us are, after all, only weak human beings. And we confuse ourselves with our agency, because after a few years of service, we begin to think that we are the agency. Because we are weak, we feel that our agency is weak. We forget that the power of the agency is drawn from the power of the millions of humans that compose the public, and not from the strength of the few humans that serve as employees. The agency, you see, is always far greater than its employees.

Another problem is that we conservation workers have been engaged in a crusade that we feel is terribly important. We are still basing our crusade on the patterns that were developed by conservation crusaders before and between the two great World Wars of 1918 and 1940. We forget that our patterns for crusading were developed in peace-time for peace-time use.

The peace-time crusade is easy when people have time to pre-occupy themselves with aesthetic and intangible things. But they do not have time for such things in war-time.

Today, we are in a state of continuous cold-war, and we conservation crusaders are using the old peace-time tactics. We fail to realize that any small headlines we can write about conservation are immediately over-shadowed by the great, black banner headlines of the world-wide tension and turmoil.

In the face of the international cold wars, our conservation crusade is in danger of becoming less and less important in the eyes of the public. Where our headlines formerly appeared in the news sections, they are beginning to appear as fillers at the bottom of the society and sports pages.

We must adopt new tactics psychologically based upon the tensions and strife of our new age. We must assure our people that there is, indeed, a golden future and that we must prepare for that future. And that the intent of natural resource conservation is basically to prepare for and guarantee that future for all of our people.

We, ourselves, must keep our balance with one eye on the memories of the past and one eye on the possible miracles of the future.

Our people are going to the moon, you know. Our people today can no more help producing moon rocketeers than peoples of the 15th century could help producing a Christopher Columbus. It took Christopher 34 days to cross the Atlantic, and it will take our rocket technicians only two and one-half days to fly to the moon. Columbus' trip was far more dramatic and dangerous than our proposed flights into space. Mankind must forever reach into the distance, and, today, we have no place to reach except into outer space.

Are we in conservation education also reaching into the future?

When our people do reach the moon, or elsewhere in space, they will, if possible, set up an outpost and then a pioneer colony.

And they will take with them pieces of the old earth to remember by. In fact, it doesn't take too much imagination to invent possible circumstances that would result in an exhibit of old-world animals on the moon, or even put-and-take hunting on the stars.

Yes, the new age is upon us, and we conservation workers must realize the drastic effects of the new age upon our people.

I have been talking here for about 25 minutes. While you have been sitting here listening to me, the population of the United States has shown a net increase of 122 new people. What do we propose to do about it?

These, then, are some of the problems of conservation education in the new age. Please do not ask me for the answers to these problems. I am only one of you. I can see dimly the objectives for the future, but I cannot tell you the proper paths to take into that future. You must decide that for yourselves. For you are part and parcel of our new age. Thank you.