The Secretary of Agriculture was asked to act favorably on them. We are hopeful that when these recommendations have been fully considered in the light of responsibilities of State fish and game directors for the welfare of wildlife in their respective States, action by the Secretary of Agriculture will be favorable.

In this connection may I point out that a State Director has every right to a voice in determining wildlife practices for his State, as well as the opportunity to assist in carrying them out under the Soil Bank program. He is dealing with public resources in which all citizens of his State have a vested interest. I am not unmindful that in many States the Soil Conservation Service has done an excellent job in carrying out wildlife management practices, yet it seems to me that State fish and game departments are ideally set up to take on the lion's share of responsibility in Soil Bank wildlife programs.

State conservation departments are staffed with men who are technically trained to recommend, help install, and follow through on fish and wildlife practices. In most states, district wildlife managers are available to offer the very type of technical service the Soil Bank Act says should be sought. I am a State's righter myself, and, in my opinion, the State-employed administrators and biologists should be given the green light to participate actively in the program by assuming technical responsibilities to the extent that their resources will permit. As yet, we do not have this green light. And if we do get it, some States may elect to have the Soil Conservation Service take over the technical part of wildlife work. This should be their prerogative.

As a former State Director it has been revealing to me to learn that many months of conference, phone calls and letters seem to be required in order to prepare regulations and a cooperative Memorandum of Understanding between two Federal Departments. I suppose we must realize the difficulty involved when two Departments with different interests and responsibilities are asked to get together for a united cause. Too, we are dealing here with a rather new concept in land use, and it is very important that all details be worked out as carefully as possible. Secretarial decisions are involved. It all takes time.

In closing, I wish to point out at least two overall benefits to fish and wildlife conservation which are inherent in the Soil Bank program. First—we have established the principle that it is no longer necessary to get maximum production from every acre of agricultural land. This principle, by itself, will help in our plea for more consideration of wildlife in our publicly supported agricultural programs. Second—for the first time in our history, an agricultural program has recognized fish and wildlife production as a land use worthy of receiving encouragement through the expenditure of public funds. This sets a precedent for applying to lands in private ownership the same multiple-use concept that now characterizes land use programs on public lands.

GENERAL GAME SESSION

THE BIOLOGIST AND PUBLIC RELATIONS

By MATT H. WHISENHUNT
Project Leader, Florida Game and Fresh Water Fish Commission
Tallahassee, Florida

It is generally accepted that any large enterprise such as our state game and fish departments must function in three major phases: Administrative, technical, and public relations. All three must be well synchronized to perform the tasks of today's state game and fish departments. Most Southeastern states can boast of their administrative and technical phases, but there the boasting stops. Without a known exception, every state has a bottleneck between the technical phase

and the public relations phase—a lag between finding better methods of game and fish management and the acceptance and putting into practice of these methods by the public. It seems high time to look at the battle scars and hold a critique on this lag between finding better methods and putting them into practice.

Probably a good place to start is with an analysis of a beginning biologist. The biologist has usually spent from four to six years in a college and is going to work for a conservation agency at a much lower rate of pay than does a graduate in practically any other field. The teachings on the college campus were accepted without question, and he is led to believe that the world is waiting for his research findings. He descends on the conservation agency as if he were the long awaited Messiah to the hunters and fishermen. The bubble bursts when he learns the hunters or fishermen don't want to be led to the promised land; they like things better "as is" and are wary of changes. He has completely overlooked the foundation and strength of public opinion. This condition results in a frustrated biologist who responds in several different ways.

He may curse the administrators who won't put his recommendations into practice in spite of public opinion. He may flail the public relations devision who won't even give his findings an airing. He may mutter dire threats at the enforcement officers who work for the same outfit as he but who don't accept his research findings and do increase public opinion against his recommendations by ignorant criticism. He may consume a large portion of the local corn crop in liquid form. He may turn in his report and launch another research project. He may try to sell his findings and their implications to the public.

Obviously this lag between finding better methods and getting them into practice should not exist, but it is certainly a real problem in the Southeastern states today. This condition is to be expected without synchronization of the administrative, technical, and public relations phases of the department. How can synchronization be achieved? How can the implications of research findings in game and fish management be put into practice with the blessings of the public?

The big job of having a game and fish department that is accomplishing its purpose lies in the hands of the administrators. Theirs is the responsibility of keeping the fact finding, or technical phase, and the proper dissemination of the findings, or public relations phase, abreast of each other or in as close alignment as possible. If the information learned is to be of value, it must be put into practice; otherwise, nothing has been gained by accomplishing the research.

Administrators should begin by weighing the research to be done. Unless there is real value in the research, it should never be undertaken much less exposed to the public view. Administrators should certainly question all research proposed—what questions will it answer? Are there answers of more importance that are needed? How will it benefit hunting or fishing? Will it benefit hunting or fishing enough to justify the expense? These are all common sense questions which should be answered prior to the undertaking of any fact finding endeavor.

After the research is completed and it is found that hunting or fishing would benefit by a change in present practices, who has the job of selling the public on the idea? The biologist who did the fact finding? An automotive engineer who designs a new automobile is not expected to sell the public on the outstanding features of the model or create a desire to buy. This is a job for the salesmen, or in game and fish departments, the public relations division, the information-education division, or similar group.

Like the automotive engineer the biologists have the problem of providing a product that can be sold, but should they be expected to do the selling, too? Technical responsibility should extend to the point of having the salesmen well informed as to the merits of the product and its best selling features. This is the bottleneck.

The flow of information is stopping between the biologist and the public. Seemingly in most cases this is due to the biologist's failure to get his finding

to the ones who are to sell it to the public. Progress is further hampered by having many people in the public relations phase who probably are excellent newsmen and photographers but who can not comprehend the implications of the findings of the biologist. The biologist must educate the salesmen as to the merits and reasons why a change in present management practices is desirable. He must educate them in terminology and facts comprehensible to the salesmen so that they in turn can disseminate the findings to the public and stimulate the public to want the change, thereby eliminating the need for administrators to cram the change down the public throat. Biologists are urged to keep in close contact with their salesmen. A research project is not completed until the changes indicated from the findings are put into practice in a harmonious atmosphere.

The enforcement officer and his potency with public opinion should not be forgotten. He is the game and fish department to the people of his locality and to those he contacts in the process of law enforcement. The public takes its problems and questions to the enforcement officer with confidence and entirely too often receives erroneous answers. Little more could be expected since most states do not require nor do they give training to enable their enforcement personnel to understand game and fish management practices.

Law enforcement, in the strict meaning, is nothing more than a tool for game and fish management. If it is found to be needed for better hunting or fishing, it should be applied. Administrators who overemphasize law enforcement will eventually find that it solves few problems confronting today's game and fish department. Law enforcement is not a cure all for the ills of game and fish as Hadacol did not cure all the ills of the human body.

The average law enforcement officer usually has but slightly more knowledge of management practice than an ardent hunter or fisherman and may have their prejudices and preconceived notions. Ideally he should be one of the best salesmen for better hunting and fishing practices—he should carry a large portion of the job of selling a program to the public. Instead of being an ideal salesman, the enforcement officer often pulls in the opposite direction by openly criticizing practices recommended by biologists because he won't comprehend or is incapable of comprehending the program. When this condition arises, administrators should advise the individual to play with the team or turn in his suit. If the individual persists with adverse criticism, his suit should be taken from him.

The biologist can improve the recalcitrant attitude of the enforcement officer by working with him and his enforcement problems. Once the officer achieves an open mind, he will more readily accept explanations of management practices. At every available opportunity the biologist should educate the enforcement group to the same extent as the salesmen of the information-education division.

The entire "findings-into-practice" process should be like raising corn. It is decided by the administrators that a corn crop be planted. The biologist selects the seed and plants it in the proper location. With proper conditions created by the research of the biologist, the corn seedlings erupt through the earth. The research is completed. All that remains to produce large, healthy ears of corn is weeding and adding manure. The weeding is done by the administrators' stopping adverse criticism from enforcement officers. The manure is added by the salesmen to insure sturdy growth to withstand the ill winds of public opinion. The biologist himself should spread a few loads of manure for faster growth. The job of the biologist is not complete until the corn is gathered. The yield will be the satisfaction of bettering hunting or fishing, and possibly twenty to thirty gallons per acre.