

of poor land are grazed. But Soil Bank or no, the squeeze is likely to get worse in the future.

We ought to face it without getting too commercial. We ought to sell the fishing and not the fish. We *can't* afford to be just another agency trying to do what is popular, without weighing consequences and measuring long-term cost. There's got to be an outfit that remembers wealth isn't measured in dollars, reminding the public that values aren't all computed in cash. There isn't anybody else to do these things, if we don't.

And to do it, we must keep the human touch. We must talk so we can be understood by the Joe Smiths of this world. We've got to explain, outline, simplify. It's easy to talk to ourselves, and mistake the echo from the council walls as the world's applause. But that doesn't get to people—and we've got to get to them.

And we must keep in close touch with each other while we're doing it. The work of game managers in the Southeast is important to Maine, California and Saskatchewan. The public relations techniques dreamed up in Oregon must have meaning in Georgia.

So let's keep a free flow of ideas going back and forth across the United States—and into Canada, Mexico and every other country that wants them. Let's develop our philosophy together, coordinate our programs. Let's not get so wrapped up in our little job, our little district, that we forget the whole sweep of conservation. We ought to be the most cosmopolitan of all Americans in our reasoning, our understanding.

Let's remember that all of us are working for the same thing: not just more fish and game but a wise enjoyment of wildlife resources; not just for "harvest" of a "crop" but for enjoyment of a living experiment.

And let's all hang together. I do not like to be throttled alone.

THE VALUE AND USE OF RADIO COMMUNICATIONS IN LAW ENFORCEMENT

By AUBREY FOWLER

Arkansas Game and Fish Commission
Little Rock, Arkansas

Our radio network is undoubtedly the most valuable one asset to our work that we have today. In dollars and cents we have an investment of around \$175,000.00 in radio equipment, but as an aid to enforcement, there is no way to estimate exactly what it is worth to us. I will say that we do not think we could do an efficient job without it.

Before installing this network our communications were limited to the mail and the telephone, and we now have constant and instant contact with personnel in every county in the State.

Our system consists at present of eleven stations located at the most advantageous spots in the State, supplemented by three repeater installations to help cover blind spots caused by unfavorable terrain. We have one other station set up in a warden quarters which is operated during the hunting season by the personnel stationed there, and a total of over 200 mobile units installed.

The hours of operation are from eight to five, seven days a week, but we have Commission approval to extend the operating period by four hours each day, which we will do shortly. We are by no means limited to this daily schedule of operations. We in the Enforcement Division make a regular practice of using any of the stations that we might need for night work, using our own personnel as operators, as many of them are licensed by the F. C. C. to operate stations.

Every employee of the Commission who is ever in the field for any purpose has a radio installed in his vehicle. We also have one in each of our two

planes and we have installed them in the cars of the four U. S. Fish and Wildlife Service men stationed in our State. This has proven extremely satisfactory as we work very closely with these men at all times. One of our counties employs three full-time Game Law Enforcement Officers and we have equipped them with radios. Our State Civil Defense Director has one of our units in his vehicle and we have a direct link with the State Police network in three places over the State.

In addition we have 26 walkie-talkies for use on special occasions where an auto cannot be used, such as in boats and in areas where there are no passable roads.

We keep a complete log on all personnel constantly. At any time a man gets in his vehicle he is required to check in with the nearest station, giving his location and destination. When he gets out of his vehicle he is required to advise the station of this and give his location. All of this information, along with exact time of each transmission, is recorded and kept on file. This gives a good picture of the activities of all personnel, and is also an excellent safety measure. As you know, the Game Law Enforcement man faces more armed violators than any other officer, and you also know that there have been numerous occasions where some shooting takes place. We in this State have had officers shot at by game law violators, wounded by game law violators and killed by game law violators. In fact, one of our present radio station operators is a former Enforcement Officer who was shot and blinded by a game law violator. It so happened that there were some other of our agents within shouting distance when this occurred and they were able to find him quickly and get him out of the woods and to a hospital. If an officer should be alone in a happening of this sort, the radio log will give an exact spot to start a search when he turns up missing.

Only this year one of our men overturned in his truck and it came to rest across his legs, pinning him to the ground. However, he was able to reach his microphone and call in, enabling us to get to him in a matter of minutes.

We render all sorts of services to our sportsmen through the radio systems. We take a weekly report from each county in the State, on the same day, on the fishing conditions in lakes and streams and publish this in the newspapers. We give reports regularly on hunting conditions and where game is most plentiful, and all this information comes in over the radio network from the Enforcement personnel.

We have not yet done a good enough job of educating the sportsmen to the fact that Game Law violations are just as important to them as any other type of law violation, the result being that we have to actually catch a person in the act of law-breaking to get a conviction. I know of only one instance in our State during the last several years whereby a person came and told us he had actually seen a game law violation and was willing to go to court as a witness. He did this and we obtained convictions of two men for taking fish with electricity. However, we do get numerous phone calls reporting violations, and through the radio we are able to dispatch men immediately to the spot.

I would say that at least 25% of the law violators would not be apprehended if we did not have a radio system. We use it constantly to obtain information for the warden while he is in the field checking hunters and fishermen. If he should find an automobile parked in a remote game area, he can immediately ascertain the owner's name and address by having the station call the Auto License Bureau. If he should check a hunter who does not have a license with him he can immediately find out if the person has actually obtained one and just left it at home. If he suspects a person of being a non-resident using a resident license, he can immediately check with some one of our personnel in the area which is given by the person as his home. This quick information service gives the officer a definite psychological advantage in questioning suspects.

On numerous occasions an officer has obtained information about a violation after the offender has left the vicinity and he has been able to radio ahead to other officers to stop this man. In no way could this be done without the radio.

Many times an officer needs more men to help encircle or to isolate through road-blocks a particular area and this can be done quickly only through use of the radio.

At any time an officer is confronted with a situation or circumstances unfamiliar to him, he can obtain help and advice, as his radio gives him instant access to hundreds of years of law enforcement experience that he would otherwise have to obtain over a period of years.

The radio network insures a most closely knit statewide organization. All personnel within range hear traffic carried on with other units and keep abreast of what is going on in other parts of the State. This covers work being done by the engineering crews, trappers, fisheries and all other divisions, thus serving as a sort of departmental news service.

To you who do not have a radio system at present, I would like to offer some observations to consider when you do install one, or even before. First, hire the very best radio engineer possible and let the man who installs your radio system be working for you. If at all possible, secure two frequencies for your exclusive use, as the sharing of a frequency with another agency will not be at all satisfactory, and the second frequency will allow the carrying of more traffic and it can also be reserved for the use of stations and personnel in supervisory and administrative capacity.

Set up strict operating procedure and insist that all personnel rigidly follow these rules. Our operators are so thoroughly grounded in this that they will refuse to carry traffic for anyone if it does not conform to regulations. We once had a man instantly discharged, by radio, for saying one mild curse word over the radio late at night when he thought all stations were off the air. Our system is just too valuable to us to jeopardize it through improper use.

Insist that your people use the network once it is installed. You will find it viewed with suspicion by some, but this will gradually disappear with frequent use. Our operators are required to report any such infrequent checking, and our Enforcement personnel have been told that if they do not use their radios it will be removed, and they cannot work without one.

In closing I would like to say that it is my firm conviction that with a good network properly installed and operated in the best manner possible, you will find your Enforcement officer better informed, with higher morale, spending more time in the field, and at least 50% more efficient than he was before having available this radio system.

REPORT ON PANEL DISCUSSION OF PROBLEMS OF GAME AND FISH RADIO COMMUNICATIONS

Committee Chairman was J. P. McRae, Chief Radio Engineer, Arkansas Game and Fish Commission, Little Rock, Arkansas, and the panel was composed of the following: Rhett McMillan, Chief Engineer, Florida Game and Fresh Water Fish Commission, Moderator; C. B. Spencer, Regional Communications Officer, FCDA Region 5, Denton, Texas; Dick Holt, Assistant Director State Civil Defense; J. T. Bradberry, National President of Forestry Conservation Communications Association, Arkansas Forestry Service, Little Rock, Arkansas; Curt Schultz, Chief Systems Design Engineer, Motorola C&E, Chicago, Illinois; John Weeks, Motorola Sales Engineer, Little Rock, Arkansas; T. W. Stevens, District Sales Manager, General Electric Company, Oklahoma City, Oklahoma; E. C. Littlejohn, District Sales Manager, General Electric Company, Nashville, Tennessee.

Considerable discussion was held on the possibility of applying microwave techniques to conservation communications. Resulting opinion is that the cost of microwave application could be prohibitive when used by a single state agency; however, if several agencies could combine their resources and needs, microwave would be feasible and desirable. The matter of such an application