

in the light of our heritage. "The goodness of the earth is God's goodness." This psalmist calls it God's mercy as God proved his good intention toward man by giving him a productive soil, great forests, abundant wildlife, clean water and fresh air. "It ought to humble us and fill us with gratitude and inspire us to a genuine stewardship to remember that ours is a heritage and not an achievement. God's goodness is in the soil, the minerals, the plants and the animals." It is our entrusted duty to use them wisely for ourselves and those who follow. Let us never forget that we ourselves may become extinct if we destroy our wild heritage.

Ladies and Gentlemen, "We are laborers together with God." You serve God as you serve your fellow man—with an all out conservation program which is good stewardship. Let us join hands in all professions to see that these beautiful hills be not charred, eroded and denuded lifeless ruins, which stand as monuments to our greed and stupidity, but instead beautiful symbols of our partnership with God.

May God help us in this inspiring task and may God have mercy upon us if we fail.

## UNIFORM COMPUTER RECORDS AND REPORTS

by

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A large volume of data is generated each year by state fish and game law enforcement agencies. Much of the information results from prosecution reports. The usefulness of the information is determined by the ease with which it can be accessed, tabulated, and analyzed.

Strictly manual filing of such records limits their usefulness. Unless more than one copy is available, only one filing system can be used, and that filing system must anticipate the most important use of the information. Filing in alphabetical order by name may be best for looking up a person's violation history, but it is not suitable for most other uses, such as tabulating violations in some particular way. Manual tabulation of information is very time-consuming, especially if the filing system hinders rather than helps the particular tabulation. Thus, a special request for information can result in many hours of searching and manual tabulation. This process is so laborious that it discourages looking at the data in new ways.

If more than one copy of the reports is available, then two or more filing systems can be maintained. Even so, there is no guarantee that any of the filing systems will help with a particular request. Also, considerable time and space are required to maintain several different files.

A more suitable method of maintaining prosecution reports is to adapt the data for use on a computer. This will provide the greatest amount of flexibility and may provide the shortest time between receipt of a special request for information and fulfilling the request.

The Division of Law Enforcement in West Virginia's Department of Natural Resources recently contracted with the Biometrics Section of the Division of Wildlife Resources to develop and maintain a computer-based prosecution report system. Such an approach has many advantages and may be applicable to other fish and game law enforcement agencies. It is probably the least expensive approach, since it uses the specialized personnel and equipment already available in another agency. It permits developing the system on a trial basis with easy termination if the system does not meet the needs of the law enforcement agency. It also limits the areas of concern for the law

enforcement agency to two areas: (1) the prosecution reports that go into the system and (2) the reports that are desired from the system.

The agency chosen to design and maintain the system will depend upon what agencies have both the computer capabilities and the time to handle the system. There may be a central computer facility in the state, and state policy may require that the agency use it. Sometimes another department or division may have the required facilities, as is the case in West Virginia. If there is more than one computer facility available, the law enforcement agency should look at the cost, the speed of the service that can be provided, and the complexity of the systems recommended by the different computer facilities relative to the needs of the agency.

West Virginia's Division of Law Enforcement is currently in the process of converting to the computerized system. Determining what information to put into the system is the most important step in the entire process. The computer can only work with the data it is given. An important omission while developing a system may prevent some desired analysis or tabulation in the future. Although changes and additions can be made at a later date, recovery of past data may be difficult and expensive. A look at the existing reports will help determine the minimum amount of information required in the system. In addition, other information that might be needed to fully identify an individual, to fill special requests, or to analyze the effectiveness of the law enforcement effort should be considered for inclusion in the system.

Prior to entering the information into the system, the data usually has to be converted to some other form, such as keypunch cards. Key punching requirements normally necessitate redesigning the report forms in order to group together the information that is to be keypunched. The personnel designing the system should be responsible for redesigning the forms in conjunction with the law enforcement agency.

There are certain characteristics of data processing that should be kept in mind when redesigning the report forms. It is likely that keypunch cards will be used to record the data for processing by the computer. The cards accommodate up to eighty characters of data. If the keypunch information will require more than eighty characters, two or more cards will be required for each record. The number of cards can be minimized by using codes where possible. For instance, the offense on the prosecution report can be reduced from many characters to a four or five digit code.

There are advantages and disadvantages to using codes. In addition to the advantage of saving space on the keypunch card, codes provide more uniformity in describing offenses. Also, offense codes can correspond to offenses used in annual or other reports, thus eliminating the need for someone in the central office to interpret the description of the offense. The main disadvantage of codes is that the information retrieved from the computer can only be as detailed as the set of codes used in the system. This disadvantage is especially true with offense codes. There is a practical limit to how many codes can be used by the officers. Therefore, there may have to be some compromise in the detail of the codes that would be required to cover every facet of the agency's work. However, there should be sufficient codes so that a miscellaneous category is used in only a few instances.

Lists of codes are seldom static. Therefore, it is important to make provisions for additions. For instance, new laws assigning new responsibilities to a law enforcement agency may require additional categories of offenses. Also, if identification numbers are used for the officers, provisions must be made for adding new employees. It is desirable for codes not to change their meaning throughout the life of the system. This way there will never be confusion in interpreting a code. As additions are made to codes, it is also necessary to have a system for disseminating the information to all personnel, including the personnel managing the system.

Once the input requirements of the system have been determined, more consideration should be given to the reports desired from the system. Since the existing reports were considered when determining what information should be put into the system, hopefully the system will produce the reports that were formerly prepared by hand. In addition, new reports should be generated in anticipation of special requests

and for special analysis. Consideration should also be given to disseminating prosecution report information to levels below the central office. For instance, in West Virginia, only the central office and the district office involved with the prosecution have copies of the prosecution report. A new report with an alphabetical listing of all prosecutions for the month will be provided for each district office. Thus, past violations of individuals will be readily available for appropriate prosecution of repeat offenders. Statewide prosecution information at the district level should also reduce the number of special requests for information regarding particular individuals. This in turn should reduce the cost of the system.

Tremendous flexibility is possible in a computerized system. It is possible to sort the data in any conceivable way. It is also possible to group together all records that have a particular set of characteristics. The only requirement is that the characteristics of interest be included explicitly in the records or that they can be generated from information in the records. These, and other advantages, will entice more game and fish law enforcement agencies into computerized record-keeping systems. As this happens, there is likely to be increased interest in making the systems uniform for purposes of cooperation and comparison between the agencies. This has already been recommended by Morse (1973). It would be desirable to develop uniform procedures as soon as possible in order to reduce or eliminate the need for changes in established systems at a later date.

West Virginia's Division of Law Enforcement is at the beginning of its system. Hopefully its experiences will be valuable contributions when the necessary steps have been taken to develop uniform procedures for computerized record-keeping systems.

#### LITERATURE CITED

Morse, W. B. 1973. Law enforcement—one-third of the triangle. *Wildl. Soc. Bull.* 1(1):39-44.

### **ROADBLOCK JUNCTION - ARKANSAS STATE HIGHWAYS 53 AND 24**

by

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#### ABSTRACT

The following paper is a summary of the planning, operation, and results of the first highly successful roadblock used by the Enforcement Division of the Arkansas Game and Fish Commission. It was held at the junction of Arkansas Highways 53 and 24, about twelve miles south of Prescott, Arkansas, in Nevada County. This roadblock resulted in thirty-one arrests and \$3,826.00 in fines and court costs for game and fish violations.

Arkansans bought 265,431 hunting licenses for the 1973-74 hunting season. Approximately eighty-one percent of the people that buy these licenses are deer hunters.

Over the last forty years, the Arkansas deer herd has grown from a few hundred in the 1930's and 1940's to well over 300,000 in 1974. Also increasing with the deer herd are the number of licensed deer hunters that enter our fields and woodlands each year. When you see the number of hunters increasing, you know that violations of game laws also increase along with them. This can be verified by the increasing number of arrests and convictions over the last few years. For example —

On November 13, 1973, the Enforcement Division of the Arkansas Game and Fish Commission felt that history was made in respect to reducing the number of violations that will occur in Arkansas in future years. The bit of history that was made is not really