Dr. Hans Gross' book on Criminal Investigation has this to say about an investigating officer and which I do believe may be readily adopted in the field of wildlife enforcement:

"His services to the public are great and his labors full of interest, will be generally admitted but rarely, even among specialists, is full credit given to the difficulties of the position. An enforcement officer should possess the vigor of youth, energy, ever on the alert, robust health and extensive acquaintance with all branches of the law. He has to solve problems relating to every branch of human knowledge. He should be ready to place at the service of Society, with all the energy of which he is capable, the knowledge thus painfully acquired. He who seeks to learn only when some notable crime turns up will have great difficulty in learning at all. His knowledge should be acquired beforehand by constant application in his ordinary rights."

If we possess these qualifications and can pursue our efforts in this manner we have little to fear in the field of enforcement of our wildlife resources.

The feather of a bird is the strongest thing in nature for its size and weight. So, too, the amount of cooperation between state and federal governments is the strongest point for an everlasting fight for wildlife populations. Let's not weaken it.

CONSERVATION OFFICERS ON AND OFF DUTY

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The title of this paper, "Conservation Officers On and Off Duty," may at first lead you to believe that there is a distinct difference between an Officer while "on duty" and an Officer while "off duty." Do not be misled. I have been a Conservation Officer for over eight years and during that time the only way that I have succeeded in being "off duty" is to leave the state. There are times when we may consider that, for all practical purposes, we are off duty; but eight-hour days and week-ends off are something the Officer hopes for but rarely is able to take advantage of. The Conservation Officer is a public official and it takes only a few days for a new Officer to realize that the public can be very critical and demanding. Because of this, our conduct must be beyond reproach, twenty-four hours a day, seven days a week.

The personal and professional qualifications for a Conservation Officer are high. The better he meets these, the better is the foundation for the execution of his professional duties. A good Officer has a liking for people and an above average understanding of human behavior. This is perhaps just as essential as a good knowledge of game and fish. He is intelligent, resourceful, and has a clear mind capable of good logical reasoning. He must have an intense interest in his work, indifferent to hours, physical discomforts, and poor pay. If you, as an Officer, possess these attributes plus a keen desire to study for greater professional attainment, you are on the way to becoming a good Conservation Officer.

The success of any Game and Fish program depends on the Conservation Officer. He is recognized by administrators as the man who we must depend upon as the salesman for game and fish departments. The Officer who does not sell the programs of his department is doing himself an injustice, as he is also the person upon whose head is heaped the scorn and abuse of dissatisfied citizens. How do you become a good salesman? I believe that most sales managers will list as their prime requisite for a good salesman is to "know your product." It is, without doubt, the duty of every Conservation Officer to know and to be able to explain the product he sells. Your product is your game and fish program, all your fellow workers, and yourself.

The duties of a Conservation Officer are so many and varied that it would take hours to discuss thoroughly just a few of them. There are three main categories of duties, however, and I think it well that we dwell a while on each. They are: (1) Management; (2) Education, and, (3) Law Enforcement. I am sure that several of you would question the order in which I list these three categories. Let me make it clear that no effort has been made by me to determine whether or not they are listed in order of importance, as the importance of each can vary because of Department policy, seasons, and locality being worked.

Why must a Conservation Officer know something about Management? Let's think about a few questions he might be asked. One might be, "Why don't you get your Department to stock some rainbow trout in Jones Creek". If such a question is put to an Officer he must know whether or not his Department is stocking trout and something about the desirability of the stream, such as temperature of the water, availability of food, etc. He might be asked if he would request his game management section to stock deer in a particular area. In order to answer questions such as this, the Officer must know something about deer and deer habitat.

The Conservation Officer must be not only familiar with all game and fish and management practices in his assigned area, but should be well acquainted with all species of wildlife in his state. The public expects him to be ready with an answer and a reason for any action taken by his Department, locally or in the opposite corner of the state. There are numerous management duties of a Conservation Officer such as taking of bag and creel census, game counts, assistance and sometimes supervision of hunts, and the operation of checking stations.

Another important phase of the Conservation Officers duties deals with education. The success of any educational endeavor depends upon the conduct and general behavior of the person conducting educational activities. Even though the state agency may have one or more public relations men, the law enforcement officer is the local representative of his Department and is looked to as such by most of the people. It is, therefore, necessary that the Officer have high moral qualities. Education deals with the various youth groups such as the 4-H, Boy Scouts, FFA, and the Girl Scouts. It has often been said that it is impossible to teach an old dog new tricks. If we consider that there is truth in this statement, the Officer should spend a great deal of time with these various youth groups. Other education media are attendance at Sportsman Club meetings, Radio-TV appearances, and Community Club meetings. On rainy days, the Courthouse and country stores should not be overlooked as places where an Officer can do some very effective educational work, if done with discretion.

The next phase of a Conservation Officer's duties, and a very important one, is law enforcement. Since time of the Magna Carta, fish and wildlife has been considered property of the people in their sovereign collective capacity, thus "belonging" to the state. Fishing or hunting, therefore, is a privilege rather than a right. To protect the public's interest in these natural resources from individuals who take more than their equitable share is the responsibility of the Conservation Officer. Even though it is widely recognized that protection of supplies of fish and game comprises but a part of an overall wildlife restoration program law enforcement remains exceedingly important.

Pinning a badge on a man does something to him—his mental outlook has to adjust to the responsibilities and authority vested in him. The authority to restrict the actions of fellow citizens should not be abused nor should it be taken lightly. Adjustments in self-restraint, judgment and personal habits have to be made.

Enforcement of wildlife laws is different in many respects from any other type of police work. Day by day it is rugged and demanding upon men who perform this work. Conservation Officers are continually out-of-doors in all types of inclement weather and must check on law violations in the roughest of terrains. Even automobile patrol work often carries Officers on rough backwoods roads. Then, too, during the open hunting season, Conservation Officers contact more armed violators than any other law enforcement group.

The Conservation Officer must continue an intensive study of his state wildlife laws as these laws are being constantly revised due to changing conditions. To neglect the study of laws and regulations is a sure sign that the Officer is slipping. The hunter or fisherman will quickly lose confidence in an Officer who has but a scant knowledge of the laws he is empowered to enforce.

The Enforcement Officer must know the reasons for arrests, tactics of arrest, and then the proper court procedure following the arrest. This includes the identifying, collecting, and preserving of evidence for use in court. In short, he must know his job from "A to Z," whether he is making a speech before a group, doing routine patrol work, or presenting a case in court.

It matters not whether a Conservation Officer is on or off duty—if he knows his job and does it, has a code of ethics including loyalty to his fellow workers, and strives to increase his professional knowledge he will be an asset to his Department. There is no place for routine law enforcement work.

Thank you.

TECHNICAL FISHERIES SESSION

A PRE-IMPOUNDMENT FISHERY STUDY OF NORTH BAY AND ASSOCIATED WATERS, BAY COUNTY, FLORIDA

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INTRODUCTION

A proposed impoundment in Bay County, Florida will create a 5,000-acre body of fresh water in a portion of North Bay, presently a salt water bay connected with the Gulf of Mexico. The primary purpose of the impoundment is to provide water for domestic and industrial use in the county, but it should also provide excellent sport fishing. In order to better formulate plans for future fish management, the Florida Game and Fresh Water Fish Commission initiated a pre-impoundment investigation. This was conducted by the Commission's Lake and Stream Survey and Fish Management Investigations Projects and financed by Federal Aid through the Dingell-Johnson Act.

The field work, conducted from December 1956 into February 1957, consisted of fish population studies and water quality analyses.

DESCRIPTION

The area includes North Bay and its tributaries: Bayou George, and Bear, Econfina, and Cedar Creeks. Impoundment of these waters is proposed by the construction of a dam across North Bay at Deer Point. From the site of the proposed dam to the mouths of the tributaries North Bay presently encompasses about 1,200 acres. It is a tidal estuary with a mud bottom and averages 4 to 5 feet in depth.

The watershed of the tributaries consists of flood plains which are mostly lowland river swamps with occasional high bluffs cut by the meandering streams. The vegetation types are lower coastal pine flatwoods, high pine and turkey oak sand hills, and high hammock lands. The head of North Bay is bounded by deltas which support an extensive Juncus marsh. Bayou George and Cedar Creeks are sluggish slow-moving streams with currents noticeable only at low tide; the sand and mud bottoms have a vegetable detritus overlay; depths vary from 3 to 10 feet and the water is stained and brackish a good distance upstream. Econfina is spring-fed, clear, fast-flowing fresh water creek over most of its course; depths are 3 to 10 feet near the mouth; and the bottom is of sand and limestone in its upper reaches. Bear Creek has a noticeable current, is slightly stained, and is brackish near the mouth; the bottom is chiefly sand; and depths are 3 to 12 feet.