necessary as violators seldom work any location more often than once a week. The violator having the choice of the time and place makes this problem anything but easy, and a sustained effort is always hard to arrange, as we have so many other duties that must be taken care of.

These people seem to be the most active at the start of hunting season in our state and, of course, this is always a very busy time for all of us. We have been able to devote more time just after hunting season, and, have had much better results. We find that a good many of these offenders work pretty hard at headlighting twelve months in the year, causing a problem that is always with us. Some of them have become very proficient with light and gun. Such was the case of the fellow that we found operating with a powerful light fastened to his gun barrel. It was fastened in such a way that when he spotted a deer, all he had to do was pull the trigger. The sights were lined up with the beam of light.

We have tried using from four to sixteen radio-equipped units stationed at strategic points. And sometimes men with walkie-talkies, as they are easier to conceal than automobile units. We work out locations for each unit according to the number of roads and area to be covered.

The first problem is to locate the violator. As you know in our time with good roads and fast transportation, the subject generally covers a wide area. He may operate in a location that you have received a report on last night, and tomorrow night be working in location some fifty or one hundred miles away. In fact, he is quite often a very elusive character. The harder you press him the more educated he becomes. A good many of ours, I am sure by now have B.A. degrees, and, if you have ever chased one on a dusty, gravel road at night, you know he is not too easy to catch after you have located him. Up to this time we have found that it is best to use as many radio equipped units as possible. Take these units into the area to be worked before dark and conceal them. If the offender is spotted, the unit nearest him will call other units nearby to block the area of operation. Then, he will proceed to try to apprehend the violator.

In addition to this plan, we have found that the use of a slow flying plane is very helpful. The observer in a plane can spot a headlight from a long way and can cover a large area quickly. The plane radio equipped, can call in ground units to block roads. If the violator eludes the units that attempt to block him, the plane stays with him and calls in other nearby units.

In spite of all these efforts and others, we still have too, too much headlighting. But the physicology of using the plane with ground units has been about the best method employed so far in fighting and preventing headlighting.

FACTORS AFFECTING AND METHODS USED IN COMBATING THE NIGHT HUNTING OF DEER IN FLORIDA

By DAVID E. SWINDELL

Florida Game and Fresh Water Fish Commission

In approaching this subject, it is first necessary to consider a number of factors which bear upon the problem of the night hunting of deer. First of all, I'd like to establish my use of the term "fire hunting" since it is so widely used in Florida. It arises from the practice of earlier days of using a fire pan on a pole as the source of light. The terms "night hunting," "jack lighting," and "spot lighting" are rarely used in Florida.

Fire hunting is relatively widespread over the State, and almost every area where deer occur in any appreciable quantity is troubled with the problem to some degree. The diversity of habitat situations is responsible for a variety of different hunting techniques.

In the pineland areas, the efforts at reforestation and fire prevention have resulted in the establishment of a rather dense undergrowth; and openings suitable for fire hunting on foot have almost disappeared in recent years. This, along with the increasing deer population, has resulted in a marked reduction of foot hunting. The use of a vehicle for fire hunting has become prevalent in such areas due to the betterment of roads and the ease of travel. •*

In south Florida the open prairies still lend themselves to practical foot hunting. In the Everglades, the airboat becomes a major problem where fire hunting is further complicated by our alligator population. Many deer are taken each year by hunters whose primary purpose is the market hunting of alligators. Since the taking of alligators by gun and light is prohibited, a gator hunter using this method has nothing to lose by adding a deer to his bag.

Florida is still faced with the attitude in many areas that the local resident has a moral right to take game and fish as he pleases. This outlook is held in many of our low-population counties and results in poor cooperation and few convictions. The influx of new residents into the State has done more to dispel this attitude than any other factor.

Fire hunting has been subject to maximum effort on the part of the Game and Fresh Water Fish Commission and its officers for a number of years.

The Commission is 100% radio equipped. Radio communication has been an invaluable tool in combating fire hunting by permitting the rapid deployment of personnel in quickly changing situations.

Our normal complement of Wildlife Officers is two per county; but it has been found expedient to bring in additional personnel from adjacent areas for work where fire hunting is prevalent. Our normal policy in working fire hunting is for our officers to work in pairs since it has been found that the apprehension of several violators at night by a single officer is extremely difficult.

The Game and Fresh Water Fish Commission has five patrol planes equipped for night flying, and these aircraft have proven an important tool against fire hunting. The airplane permits the patrol of large areas in relatively short periods of time. Checks may be made of two or three counties in one night's patrol. It has been found most practical to assign an officer who is familiar with the area being patrolled to fly as observer; since much of the value of the aircraft is lost if the pilot cannot accurately direct ground units to the proper roads to reach the hunter.

Perhaps the greatest value of the aircraft is its psychological effect. Many violators have an exaggerated concept of the efficiency of the airplane and have come to fear it greatly. Since Florida has a great deal of night-flying military and commercial aircraft, the harassment to the airplane-conscious fire hunter is great.

Florida is blessed with a law giving Wildlife Officers a wider degree of latitude in matters of search and seizure, and our officers utilize this to good advantage.

Rule 15 of the Regulations of the Florida Game and Fresh Water Fish Commission prohibits the possession of a gun and light at night for the purpose of taking wildlife, and further stipulates that the fact of possession at night constitutes *prima facie* evidence of possession for such purposes. This rule has been our most useful tool in combating fire hunting; since it permits apprehension before a deer has actually been taken. Most of our fire hunting charges are filed under this rule.

Perhaps the most promising long-range approach to the fire hunting problem is that of an intensified educational and public relations program. Not a program executed by four or five public relations men; but one in which every employee makes a constant and vigorous effort to win over the sentiments of the public to the necessities of good conservation practices. Education which does not have the active participation of all the members of a conservation department has little hope of approaching its potential. We, in Florida, are trying to accomplish this end by emphasizing such a program. Through education we feel that we can, in time, do more to break fire hunting and other violations of game and fish laws than by any other method.