In conclusion it should be pointed out that all possible mass media for public education should be used. The mass education program should be tailored to the needs of the individual situation in a manner which the public will accept.

TECHNICAL LAW ENFORCEMENT SESSION

A METHOD OF TEACHING WATERFOWL IDENTIFICATION

By HAROLD M. STEELE
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This session deals primarily with an actual presentation of the methods described by Douglas E. Wade last year at this conference.

Being an enforcement officer I have long since realized the importance to each Conservation Department of making available to the officer in the field every tool which will insure his acceptance by the public as a professional in his field. Such acceptance reflects upon his department a respect by the hunting and fishing public which can be gained only by having well informed personnel in the field.

The Conservation Officer is the "front office" for any Department. He is the contact man, the liaison man between the administrative, the research, the information and educational branches and John Doe, the man who pays the bill. It is expected, and properly so, that when the Officer contacts "John" in the field, the Officer should know the tools with which he works. It is expected of the Officer that he know the various types of wildlife with which he deals, and at least have a basic knowledge of conditions affecting the scarcity or abundance of that species. If the Officer has such knowledge and is able to impress the individual sportsman with it, he becomes a valuable asset to the Department. If he does not have such knowledge, it becomes understandable that the sportsman may "question" the entire operation of the Department. To the average man in the field, the Officer who checks him *is the Department.*

We are presenting the visual-aids materials you are about to see with the thought in mind that primarily we are interested in THE BIRD IN HAND—the duck or goose we check in the hunter's bag.[1]

A METHOD OF TEACHING WATERFOWL IDENTIFICATION

In so doing we have tried to impress upon those to whom we present this demonstration that in each different duck there is one fool-proof, easily remembered and distinctive marking or conformation by which the bird may be identified. It may be a distinctive head shape as in the Shoveller or Canvasback. It may be an unusual coloration of the bill as in the Ring-necked Duck. Certainly size is a factor in separating the various kinds of birds in the bag. The speculum or wing-patch offers an easy method of telling the "look alikes" one from the other. To these ends we have developed such aids as these color slides, wing mounts and mounted specimens which you see here.

Please note the distinctive differences in the "wing patch" on waterfowl that otherwise have almost the same coloration and size. By repeatedly stressing certain characteristics in placement of color combinations found in the wings and using the color slides in conjunction with the wing mounts, we have found that the Officers and others to whom the program has been presented tend to

[1] Kodachrome slides, mounted wings and mounted specimens of waterfowl were used in demonstration of methods developed in cooperation with the Information and Education Division of the South Carolina Wildlife Resources Department.

remember that particular feature much longer than if a number of identifying markings were used. Repetition and drill and testing pay off.

We know that in South Carolina and in Virginia, and in other places where this program has been presented that it has been well received. Increasing numbers of requests, not only in Warden training courses, but by sportsman groups, bird clubs, youth groups and others for this identification program lead us to believe that a simple presentation of such a program, coupled with numerous visual aids, has many possibilities for building up interest in waterfowl resources. It is very easy to lead directly from the identification phase into survey methods, flyway management and wetlands values. After an interest is gained it is easily expanded. We believe the first step in gaining that interest is through becoming more familiar with the duck itself.

If any of the members here are interested in instituting this program in your own State, Mr. Wade or I will be glad to give such information as we have, or you may write to the South Carolina Wildlife Resources Department, Columbia, S. C.

SESSION ON UPLAND AND BIG GAME

MANAGEMENT TECHNIQUES WHICH ENCOURAGE BOBWHITE QUAIL TO NEST

By WALTER ROSENE, JR.
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For the last decade emphasis has been placed on increasing the bobwhite's food supply as a means of building up populations. Recent studies (Gehrken, 1954; Hunter, 1954; Rosene, in press) have indicated that this "one-shot" method of approach generally is not adequate for an effective quail management program in the Southeast.

Providing for adequate food supplies is of course important in quail management, but in many places deficiencies in the quality and quantity of cover on the quail range may be responsible for below-normal production. Coverts for quail in the southeastern states have generally deteriorated in the last 15 years and quail populations have declined in this region during the same period.

Most southeastern wildlife biologists are aware of the cover requirements of quail during the winter season, but many of them are not as well posted on the nesting cover needs of the species. A good nesting environment is vital to successful quail management as nesting success largely determines the size of subsequent winter populations.

Stoddard (1931) conducted the first thorough investigation of the nesting requirements of the bobwhite. Of 600 nests studied, 89 percent of the total were in unburned growth of the preceding season, 82 percent in growth sufficiently open at the birds' level for them to run about freely and 74 percent within 50 feet or less of an open, grassy edge. The results of his investigation can be used as a guide for management techniques which encourage quail to nest.

During the past eight years, bobwhite populations have been studied in relation to land use on quail preserves in Alabama and South Carolina. In this period an attempt has been made to correlate whistling cocks and corresponding breeding population with nesting cover types and breeding success.

STUDY AREAS

Good Habitat Other Than Nesting Cover: In 1952 and 1953, a South Carolina area of 2,342 acres which had an adequate supply of winter food and cover,