

but these are all still vulnerable to invasion by honeysuckle. Early frosts may get some few annual plantings but only a very small percentage of those plantings made prior to July 1 are damaged by early frosts.

SUMMARY

It has been demonstrated to our satisfaction that annuals are superior to our present perennials for the following reasons:

1. Annuals are cheaper than perennials.
2. Annuals are utilized by more species of game than perennials.
3. Even in adverse years annuals will produce some seed.
4. Annuals are in great demand and are widely accepted by sportsmen and farmers. This popularity continues to expand annually.
5. The farmer will devote better land on his farm to plantings made on a temporary basis than he will to permanent ones.
6. The hunter finds more game utilizing annuals.
7. Annuals produce the same year that they are planted.

THE DEVELOPMENT OF PUBLIC HUNTING AREAS IN MISSISSIPPI

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I do not hesitate to say that the major concern of all Game and Fish Commissions should be the establishment and development of public hunting areas whereby wildlife can be managed on a sustained basis for the enjoyment of all our out-of-door-loving public and the generations of pseudo Davy Crocketts that will follow them. So much has been written and said concerning the value of the rest and relaxation gained by John Doe partaking of the pleasures provided by our woods, fields, and streams, that I feel I need not stress their value to you today but only mention the fact to remind you of the task before us and the responsibilities we as "wildlifers" have in the matter.

We in Mississippi have realized only during the past few years the urgency of providing well-developed and well-managed hunting areas for our public. Through the cooperation of sportsmen, landowners, both public and private, and Commission personnel, definite progress has been made toward providing our public with places to hunt and something to hunt on a sustained-yield basis. For that I am thankful.

All too often we in the wildlife field, realizing the wide gap between the theoretical and the practical, tend to become side-tracked in "hodge podges" of our own creation letting the sportsman and landowner go their worried way. No longer should this be the case; management for public hunting is our problem and we must face it.

In setting up our managed public hunting areas we drew heavily upon the experience gained by our fellow colleagues in Florida who most diligently assisted us and for which we will ever be grateful.

Our managed areas developed for the controlled hunting of deer and wild turkeys now comprise seven areas, add up to 397,000 acres, and are located principally in the delta bottomlands and coastal pine regions of Mississippi. Several other areas totaling an additional 500,000 acres are suitable and available for such a program at this time and are scheduled for similar development as soon as funds will permit.

Establishment of all of Mississippi's areas under this program has followed a similar pattern under similar conditions, so I will, therefore, discuss in more detail the development of the Red Creek Wildlife Management Area as it was the first such area set up and has thus been the proving grounds for techniques and practices used on all the areas.

The area is situated in the coastal long-leaf pine region of southeastern Mississippi. Initiated three years ago, the area totaled 85,000 acres. This acreage was owned by 85 individuals comprising 97 percent of the landowners and 99 percent of the land within the proposed boundary. Since that time 40 landowners have leased to the Commission an additional 10,000 acres bringing the current size of the area to 95,000 acres. Principal landowners are the University of Mississippi, United States Forest Service, International Paper Company, and L. N. Dantzler Lumber Company.

The entire area is an outgrowth of a 6,000-acre refuge under management of the Game and Fish Commission since 1942. Like so many other refuges this one had really never paid off. Good populations of deer and wild turkey had been built up within the refuge, but illegal hunting and trespass problems made the overflow of game from the area of little value to anyone. Believing that the area surrounding the refuge could be developed and managed for controlled hunting for the general public rather than a few individuals, the problem was discussed with local landowners and sportsmen's groups. Although many were hesitant about the program at first, all were in agreement that almost any change would be an improvement over the current situation. Operating along this line of reasoning, and, pleading for the cooperation of all, leases were soon signed on lands to be included within the management area.

The lease agreements we used in setting up management areas are patterned after those used in Florida and are for ten years' duration. No fees are paid for leasing the land; most landowners are satisfied if the Commission will agree to prevent out-of-season hunting, assure them that the hunters are hunting legally, and that their timber, livestock, and farming interests are being protected.

Since most of the land on which we operate is utilized for timber production, the wildlife management program fits in very well. Many roads, firelanes, and fences are constructed cooperatively with other agencies. Control burning is done for the benefits of those agencies concerned. Fire fighting is a cooperative venture as is the reporting and control of game law violations. Lessors provide land for clearings, building sites, refuge areas, and public hunting. We, in turn, protect their interests from unsolicited molestings by man, beast, and poacher.

Under our management program the main interest is placed upon cooperation with the landowner, and secondly, cooperation with the sportsman and his affiliations. We feel if we have this harmony, the wildlife, with a little boost from us here and there along the way, can very well take care of itself.

Principal assistance to wildlife populations has been given through habitat improvement activities that have included food plantings, creation and/or preservation of land clearings, provision of watering facilities, and fence and firelane construction. In altering refuge maintenance operations into management area development activities on the Red Creek Area, refuges were changed to restoration areas and increased in size from 6,000 to 12,000 acres; food plantings were increased from 20 to 100 acres; fencing was extended from 25 to 40 miles; and, 100 miles of roads are being cooperatively maintained.

Plantings composed of reseeding annuals and perennials are designed to hold recently established populations (especially wild turkeys) in restoration areas fenced against livestock and other molestations as well as speed up population gains in such areas and supplement native foods in critical or "off season" periods.

Food plot clearings average two to seven acres in size and are seeded principally to rye grass, rescue grass, wheat, oats, ladino, crimson and ball clovers. Oats and wheat are planted as supplements in clover mixtures, rescue and rye grass are planted as straight seedings or in grass mixtures. After plots are fertilized and seeded in the fall, no maintenance is required until late spring when clovers make a seed crop and begin to die out. Then as summer weeds appear clipping with a rotary clipper is regularly done. This clipping controls

weed and sprout growth, provides dead organic matter for harboring insects utilized by turkeys, provides openings for young turkeys, and, in ladino clover, promotes new, tender growth wildlife food.

Fall maintenance activities include fertilizing, light disking of reseeded plant varieties, and a small amount of seeding of annuals as required.

Practically all development activities, whether they be planting, construction, or miscellaneous, are accomplished by force account utilizing our own labor, striving for long range, efficient operation with a minimum of maintenance outlay after initial development.

Public utilization of the area is planned and managed, keeping in mind the interests of the landowners, welfare of the game populations, and cooperation of sportsmen utilizing the area. Plans for operating the initial hunt were first discussed with landowners in order to acquaint them with the program, receive their recommendations, and, above all, obtain their cooperation. Secondly, hunt plans were discussed with local sportsmens' groups. Public relations for the hunts were handled through conducted field tours of the area for newspaper, radio, and TV personnel. Commissioners, sportsmens' groups, student groups, Boy Scouts, etc., have also been taken on tours of the area in order to reach as many outlets as possible in our explanation of the program. Any changes in regulations affecting the operation of the area are first discussed with landowners and sportsmen before adoption in order that they will know the reasons behind the revisions and will cooperate in assuring their acceptance.

Managed hunts are annually held on the area for deer and wild turkeys. Also, the squirrel hunting season is retarded to open with the first deer season providing for a good check on much of the squirrel kill. Hunting is free, the only requirement being that hunters comply with statewide license regulations. Rules and regulations affecting the hunt are kept to a minimum. We do not place a limit on the number of hunters participating, nor the number of times they hunt; nor do we assign them to compartments or groups, or provide them with guide service.

Each hunter is required to check in and out of a checking station where records regarding the hunter and his kill are kept. Each hunter is given a map of the area pointing out checking stations, restoration areas, and principal landmarks. Area hunting rules and regulations are printed on the reverse side. Principal regulations, or those likely to cause the most discussion, are lettered on signs placed at all checking stations and principal entrances to the area. This practice familiarizes hunters with new regulations (they are usually read aloud at stations benefiting those who cannot read), cutting down on the amount of explaining required of Commission personnel.

We believe our hunter cooperation has been excellent. Compared with that of former years, it has been almost unbelievable. I believe one factor bringing this about is our concern for the hunter and his welfare. An example of this is the treatment of strayed hunting dogs, a continual problem in seasons open to dog hunting. Commission personnel pick up all dogs that have strayed from the hunting parties. Since each dog owner is required to have a collar and name plate on his dog, it is not difficult to return the dog to its owner, or, if he has already checked out of the area, the dog is fed and housed in the Commission's dog kennel where he can be claimed later by the owner free of any charge. Many believe this is a service beyond management and should not be performed. Others believe a fee should be charged; however, considering the confidence a hunter places in an organization for such treatment of his most beloved, this service more than pays for any inconvenience on the part of our personnel.

In summarizing our management area program, I wish to point out that areas are being developed and managed in order to provide a wide range of public utilization for as many people as possible. We are striving to serve more than any one kind of hunter on a particular area; we like to consider as many types for which the habitat offers some future utilization as well as provide something for the fisherman, camper, and nature lover. We are continually striving for closer cooperation with the landowners on whose land we operate and on whose interests we infringe as well as continuing to work with our sportsmen and hunters for the best interests of all parties concerned. The Game and Fish