

KENTUCKY'S PRIMITIVE WEAPONS HUNTING AREA
ITS MANAGEMENT, ADMINISTRATION,
PUBLIC USE AND ACCEPTANCE

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In July, 1962, Kentucky's Primitive Weapons Hunting Area was established as a cooperative undertaking of the Kentucky Department of Fish and Wildlife Resources and the U. S. Forest Service. Two hunting seasons have gone by and there has been time to evaluate the primitive weapons concept and to develop management policies for the administration of the area. We have been well pleased thus far with the apparent success of the Primitive Weapons Hunting Area and plan to continue with an intensified management program in the future.

"Primitive weapons" here are defined as longbows, crossbows, muzzle-loading rifles and muzzle-loading shotguns. Within the Primitive Weapons Hunting Area, use of these weapons is permitted to the total exclusion of conventional, breach-loading firearms.

To our knowledge, this is the first such area in the Nation. Bowhunting and hunting with muzzleloaders are certainly not new. In modern game management, bowhunting is a commonly accepted practice; and the sport attracts thousands of followers. Most states permit hunting with longbows and provide special seasons to accommodate archery hunters. In certain cases, bowhunting for deer is permitted to the exclusion of firearms as in the heavily populated sections of New York and New Jersey, for instance, where firearms present an unwarranted danger to life and property. On the other hand, crossbows are almost universally banned as hunting weapons, while muzzleloaders receive little special attention.

Interest in these various weapons grows as today's mobile sportsman seeks ways to add new dimensions of sport to his hunting experiences.

Regardless of the general status of these weapons as hunting implements, to my knowledge, Kentucky's Primitive Weapons Hunting Area is the only place of its kind where hunting is limited to primitive weapons solely for recreational purposes, that is, in an area where extenuating circumstances do not preclude the use of conventional firearms. Is it justified?

The Primitive Weapons Hunting Area is a 7300-acre unit in Bath and Menifee Counties, being a portion of a 20,000-acre block of federally owned lands on the Morehead Ranger District of the Cumberland National Forest. Geographically, it lies on the western slope of the Cumberland Plateau in Northeastern Kentucky. It is within 150 miles of Ashland, Lexington, and Louisville, Kentucky, and the Cincinnati, Ohio metropolitan area. An estimated 11 million people live within one

day's drive. Nevertheless, it falls within the depressed eastern region of Kentucky; and the two counties share the economic woes of Appalachia.

The topography is typically a highly dissected peneplain with steep slopes, narrow ridges and valleys, prominent knobs and long, continuous cliff lines. No roads cross the area except in the northeastern corner. This combination of scenic topography and roadlessness complements the primitive weapons hunting concept and presents a remote atmosphere reminiscent of pioneer days.

The habitat is typical of the multi-aged oak-hickory forests of the Plateau. The woodland is unbroken except for a few intermingled old fields. Fire and timber cutting have occurred at various times in the past over all of the area but, under management, the land now carries a well-stocked, mixed hardwood stand capable of supporting Eastern Kentucky's forest game species. The cliff lines previously mentioned form somewhat of a barrier to hunter and game movements and the ridgetops tend to be devoid of water during the late summer and fall.

The above combination of factors, when considered in the light of a ruffed grouse, gray and fox squirrels, a few cottontail rabbits, bobwhite quail, mourning doves, and a variety of furbearers. Both deer and turkey were extinct until restored to the area in recent years. Deer were stocked in Menifee County in 1954 and in Bath County in 1957, turkey in 1959 and 1960. Deer populations quickly multiplied; and a hunters-choice season was held in 1961. Unfortunately, this resulted in an overkill which drastically reduced the breeding population and from which the herd is only now recovering. No open season has yet been held for hunting the wild turkey.

The above combination of factors, when considered in the light of a growing interest in muzzle-loading and archery weapons, inspired the cooperators to establish the Primitive Weapons Hunting Area, to be managed with the following objectives:

1. Promote "primitive weapons hunting" and emphasize quality of hunting experience;
2. Demonstrate wildlife management techniques, as applicable within the Cumberland Plateau, under National Forest Multiple-use-Sustained Yield management concepts, and;
3. Stimulate the local rural economy.

Management responsibilities follow the traditional State-Federal policies toward wildlife management on National Forest lands. The State of Kentucky regulates hunting, conducts wildlife surveys, is responsible for stocking and law enforcement and assists in boundary identifications. The Forest Service manages the land and the habitat, is responsible for forest protection and development, the transportation system, and assists with boundary marking and signing. The agencies share in the publicity and I & E efforts.

In the administration of the Primitive Weapons Hunting Area, the cooperators are guided by the following policies which are:

1. To keep restrictive regulations to a minimum within the primitive weapons hunting concept and sound game management principles.
2. To emphasize development of the habitat for the primary game species--deer, turkey, grouse and squirrels, and do so as much as possible through indirect habitat manipulation;
3. To develop and maintain populations at the maximum sustainable levels compatible with multiple-use objectives;
4. To protect and retain so far as possible the remote atmosphere as an essential element of quality hunting experience, and;
5. To facilitate optimum harvest of the annual crop and provide needed hunter facilities as required but in such a manner as to fulfill 4 above.

The State has prescribed standard mechanical requirements governing the sanctioned weapons. Otherwise, regulations are the same as for State-wide hunting. No special licenses are required. Open seasons are concurrent with the general open seasons. Bag limits are the same. Every effort has been made to avoid regulations favoring the primitive weapons hunter over the conventional hunter beyond establishment of the area itself. It is believed that this policy has been valuable in achieving a favorable public attitude in its support.

Habitat development has been aimed at protecting or improving the habitat for the primary forest game species—deer, turkey, grouse and squirrels. As much as possible, development has been and will be implemented through the employment of timber management measures modified as necessary to meet habitat goals. Needed elements of the habitat not made available by means of coordination with other functional activities under multiple-use management have been and will continue to be provided through direct investment in various types of improvements including waterholes, permanent clearings, food and cover plantings, etc.

An attempt will be made to build the deer herd to the maximum sustainable population level compatible with multiple land use and other game species requirements, deer being the key species. Deer numbers are presently far below optimum level. Turkey numbers are also low but squirrel populations are high following two good mast years. Efforts in squirrel management will be aimed at retaining certain key stands in prime conditions for squirrel habitat, the intent being to concentrate the animals along favored squirrel-hunting routes. Various techniques will be tried to concentrate grouse which are moderately abundant. It is not expected that full utilization of the annual surplus crops of small game will be realized. The effort to protect the remote atmosphere yet facilitate use has required the development of a basic foot trail system, thus making the entire area reasonably accessible to hunters without undue disturbance. Camping has been limited to the fringes of the area in order to prevent occupancy of choice hunting stands by campers, and to facilitate cleanup and fire control activities. Timber cutting and mineral operations are administered in such a way as to minimize their impact upon esthetic values.

Has use warranted the establishment of a special area of this type and what has been the reaction of the general public?

We do not have accurate records of use. However, during the 1963 season, the District Ranger conducted sample car counts to estimate deer hunter use. From these counts, it was estimated that 1000-1200 hunter visits were made. The local conservation officers and forest workers contacted at random 95 deer hunters who had hunted a total of 290 days. Of these, 59 used longbows and expended 191 hunter days, 3 used crossbows and expended 13 days, and 33 hunters with muzzle-loaders expended 86 hunter days. This effort resulted in a known kill of 14 deer, 9 going to longbows, 2 to crossbows, and 3 to muzzleloaders. This compares with a total kill in 1962 of 9 deer.

The 95 hunters interviewed represented 22 Kentucky counties and Ohio. Nineteen hunters had traveled from the Ashland area 70 miles distant, 16 from the Cincinnati area 130 miles distant, and 8 from Louisville, more than 140 miles distant. Only two were local residents.

Deer hunter use of this area exceeds the Forest-wide average. Based on hunter card returns for 1963, the Cumberland produced approximately 250 deer from 430,000 acres. Use was estimated at 14,000 visits. This is an average kill of one deer per 1610 acres and one hunter visit per 29 acres. The Primitive Weapons Area produced 14 deer on 7300 acres, or 1 deer per 520 acres and a minimum use, based on the interviews, of one hunter visit per 25 acres or, a maximum use, based upon the 1200-visit estimate, of one hunter visit per 6 acres. This would seem to indicate that the Primitive Weapons Hunting Area re-

ceives more pressure, rather than less, as a result of its special status. It certainly receives more concentrated bowhunting pressure.

In addition to deer, muzzleloader hunters and archers have shown an increasing interest in small game hunting, although use and kill figures are not available. Greatest effort has been expended on squirrels with lesser interest in grouse. Development of squirrel hunting use has been dependent upon local people procuring the necessary firearms and use has increased as this is accomplished. A certain amount of squirrel hunting is also done by sportsmen scouting the area for deer sign prior to the deer season.

The Primitive Weapons Hunting Area has been enthusiastically received by primitive weapons hunters while, although expected, amazingly little protest has been received from displaced conventional hunters. Neither the Forest Service nor the Department has received written complaints or criticism from the public. There was initially some grumbling expressed by squirrel hunters at local sportsmen club meetings; but this quickly subsided.

Definite steps were initially taken to avoid arousing public feeling against the area during the critical first year when unfavorable opinion might have been disastrous. These steps included a publicity effort to acquaint the public with the purposes and objectives of management, a policy of leniency by law enforcement officers in handling first-offense trespassers, and finally, making an effort to personally contact all hunters turned away in order to explain management objectives to them and to suggest nearby locations where they might continue their outing. Whether or not these policies helped in achieving establishment without protest, such was the case.

In addition to the steps originally taken to avoid criticism, the following factors now play an important part in maintaining favorable public opinion:

1. The Primitive Weapons Area is only part of a 20,000-acre National Forest ownership block, the remainder of which has similar habitat and population levels and is adequate to meet local pressure for general hunting needs.
2. There are now only some 15,000 licensed deer hunters in Kentucky and, with 60 counties opened to hunting, pressure is widely spread. The loss of 7300 acres does not handicap the conventional hunter.
3. The cooperators have continued to publicize the unique recreational values available to Kentuckians within the area.
4. Adjoining landowners are very favorably disposed towards continued management because of the relatively good conduct of primitive weapons hunters and have not pressed to have the land reopened to general hunting.

There are no indications that establishment of the Primitive Weapons Hunting Area has yet stimulated the local economy except that non-local hunters seem inclined toward using commercial tourist accommodations. Non-local conventional hunters, on the other hand, who hunt adjoining lands seem more inclined to camp out or "rough it." At this point, the total effect upon the economy is conjectural; however, as the area becomes more widely known, it is expected that non-local use will increase substantially with a resulting beneficial effect upon local businesses. There is, on the other hand, little reason to believe the conventional hunting pressure would have appreciably increased with time nor would archers be attracted in such numbers as is now the case.

One final point: It has not been shown that primitive weapons hunting will exert sufficient pressure upon the deer herd to prevent over-population. In anticipation of the worst, management has dictated planning for this eventuality. Browse plots have been established

within the area and will be remeasured annually to establish condition and trends. Tolerable browsing limits have been set and, if these limits are exceeded, hunting regulations will be relaxed by phases to encourage increasingly greater hunting pressure. The last resort would be to reopen the area to a season of conventional hunting, and thus reduce population densities. We do not expect to have to resort to such drastic action in the foreseeable future.

Both the Forest Service and the Department of Fish and Wildlife Resources count the Primitive Weapons Hunting Area as an unqualified success. Management objectives are being realized; hunter response has been enthusiastic; and primitive weapons hunting is proving to be a useful concept in game, recreation, and land use management at a time when there is increasing need to provide the hunting public with more sport per unit of game taken.

THE NEW LOOK ON SOUTHERN NATIONAL FORESTS

By

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Forest Service

Following purchase of the Southern National Forests, the Forest Service was faced with two major jobs: (1) protection from fire, and (2) re-establishment of a satisfactory and manageable forest cover. A vigilant presuppression program and a better informed and cooperative public have gone a long way toward bringing wild fires under control. Getting the forests in shape for management was a more difficult job. Particularly so, since watershed protection was one of the major purposes for which the forests were purchased. Much of the acreage had been high graded, burned and otherwise abused, so that many important tree species which belonged in the forests were lacking or in very short supply. Age class distribution necessary for management was badly mixed up.

To correct these conditions, silviculturalists resorted to the time-tested method of improvement cutting. This type of cutting is the accepted pioneer method for correcting conditions similar to those found on the new forests. Improvement cutting removes the "worst first" by commercial harvest followed by non-commercial release of suppressed growing stock. Improvement cutting and reforestation has been successful to the point that composition, stocking, and soils have improved. It is now time to change to silvicultural methods better adapted to regeneration and management of the southern forest types.

The new system of management has attractive opportunities for developing a high class wildlife habitat. Let's look at some of the basic reasons for the new management system and how it will tie into the wildlife program.

Most of the major commercial tree species in the South are relatively intolerant. They represent the early or intermediate stages of natural succession. It is not coincidence that those species are valuable commercially, since they are the ones most likely to lose their lower branches through natural pruning—thus furnishing clear wood products. It is also significant that they possess the ability to reproduce readily after site disturbances, such as fire, insects, disease or cutting.

Similarly, with only few minor exceptions, Southern forest game prefers subclimax tree and plant associations. This indicates that major site disturbances have been a common occurrence since time began.