Landowner Cooperatives for Income and Recreation from Wildlife and Forest Resources

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Abstract: A joint project was conducted between the Mississippi Cooperative Extension Service and Tennessee Valley Authority to establish 3 landowner demonstration cooperatives in northeast Mississippi. The objective of the project was to illustrate to nonindustrial private forest (NIPF) landowners the benefits of joining their lands with their neighbors to manage and market the wildlife and forest resources. A total of 62 landowners with combined land of 3,698 ha participated. Landowners were shown how to organize a cooperative, informed of different management and marketing objectives, given general management recommendations, and directed toward sources of technical management and marketing assistance. Cooperatives illustrate an approach by which adjoining landowners can manage and use existing wildlife and forest resources to increase profit from their lands.

Proc. Annu. Conf. Southeast. Assoc. Fish and Wildlife Agencies 42:502–507

Private forest land accounts for nearly 70% of the forest resource in Mississippi (Donner and Hines 1987). A large portion of this land, especially in the northeastern part of the state, is not being managed for wildlife or forest production. Lack of management has resulted in a loss of potential income to landowners, decreased recreational opportunities, and loss of revenue to the state (Daniels and Griffin 1984).

Many landowners have not capitalized on the wildlife and forest resources on their lands because of 1) a lack of knowledge and guidance concerning management and marketing, 2) individual forested tracts too small for profitable management,

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and 3) a lack of control over their property to prevent trespassing and illegal hunting. Consequently, there is a need to educate and illustrate to NIPF landowners methods of managing the wildlife and forest resources for an economic return. To address this need, some states have developed alternative management programs for NIPF landowners to better manage and utilize wildlife and forest resources; Vermont's "COVERT" project is one example. In this project, traditional timber management philosophies on NIPF lands were changed to include a holistic approach to land management emphasizing integrated resource management (McEvoy et al. 1988). With this approach landowners have a wide range of land management options and are motivated to manage their lands not by natural resource professionals, but by their own peers. Other states, like Michigan, have initiated public-fee systems which pay rural landowners an annual per-acre fee to allow public hunting on NIPF lands (Holecek 1983).

In September 1984, a 3-year joint project was initiated between the Wildlife and Fisheries Department of the Mississippi Cooperative Extension Service and the Division of Land and Economic Resources, Tennessee Valley Authority. Our objectives were 1) to inform NIPF landowners in northeast Mississippi of the economic benefits of combined wildlife and forest management, and 2) provide appropriate management options for improving the productivity of these 2 resources. A wildlife-forestry landowner cooperative was defined as a group of individually-owned tracts of land joined together as 1 unit for the common purpose of managing and marketing the wildlife and forest resources. The concept of wildlife and forestry landowner cooperatives on NIPF lands is not new. Shaw (1981) proposed establishing "timber-wildlife cooperatives" on private lands for the purpose of providing monetary benefits to landowners from the sale of timber and access for hunting.

We thank the Soil Conservation Service, Agricultural Stabilization and Conservation Service, Mississippi Forestry Commission, Mississippi Department of Wildlife Conservation, and the field personnel of these agencies for cooperation.

Methods

We identified 14 sites in a 7-county area as potential locations for demonstration cooperatives. Three sites in northeastern Mississippi were selected based on the willingness of county extension agents to participate.

Five steps were involved in establishing the 3 demonstration cooperatives. First, county extension agents were asked to locate areas where a cooperative might be feasible. Agents were encouraged to consult with other agency personnel. When possible, a county wildlife-forestry landowner advisory council, composed of county agency personnel, was formed to facilitate the process of identifying landowners to participate in the project.

Second, agents invited key forest landowners (landowners who were progressively-minded and leaders in their communities) and their adjoining neighbors to attend an educational program on wildlife and forest management. The program stressed the benefits and options for managing and marketing wildlife and forest

resources on NIPF lands. Emphasis was placed on joint management to increase the available land unit necessary to manage species such as white-tailed deer (*Odocoileus virginianus*) and eastern wild turkey (*Meleagris gallopavo*) and to increase the cost-effectiveness of forestry management and marketing opportunities.

Third, NIPF landowners interested in forming a cooperative were encouraged to hold an organizational meeting to develop a working structure for the group. During this meeting general wildlife and forestry management and marketing objectives were defined for the cooperative.

Fourth, long-range wildlife and forestry management plans were developed based on cooperative objectives. Cooperatives were then directed toward sources of technical management and marketing assistance (e.g., private resource consultants).

Fifth, educational support was provided to cooperative members by the Mississippi Cooperative Extension Service to facilitate wildlife and forest management. Cooperatives were monitored throughout the project period. Attitudes of participating landowners toward management and economic activity were noted. Specific costs and income associated from wildlife and forest management were not documented during the project.

Results

Redbud Conservation League Cooperative

The Redbud Conservation League (RCL) Cooperative consisted of 36 adjoining landowners in a 2,244-ha unit in Tishomingo and Itawamba counties. Past land use included a mixture of forest, row crop, and cattle production. Eighty-five percent of the cooperative land had not been managed for wildlife or forest production.

The RCL Cooperative elected a president, vice president, secretary-treasurer, and 2 board members to coordinate the affairs of the cooperative and act as a cohesive force for the group. Objectives of the RCL Cooperative, in decreasing order of importance, were to 1) control trespassing and unethical hunting, 2) manage the forest resource for increased profits, and 3) manage for wildlife, primarily deer. RCL members did not allow any form of fee hunting; however, permission cards were issued to family members and friends for hunting privileges.

Wildlife-forestry management plans were written for 28 of the larger landowners in the RCL Cooperative. Management activities conducted on RCL lands were 1) an impoundment for waterfowl, 2) thinnings of pines, 3) harvesting of mature pines, 4) firelane construction and seeding in a wildlife food, 5) food plots for deer and quail, 6) bushhogging and disking, 7) participation in the Conservation Reserve Program, and 8) participation in a forest management assistance program with an industrial timber company.

Since formation, RCL landowners have been successful in eliminating most trespassing and unethical hunting problems on their properties. This was considered an important accomplishment for the RCL group since controlling trespassing and unethical hunting was a top priority. RCL landowners soon began to visualize the

results of their management efforts. Some began seeing deer for the first time in >6 years, while others began receiving income through pulpwood and sawtimber sales, and annual payments from Conservation Reserve Program land. Attitudes of RCL members toward management began to change as the positive results of their efforts became apparent. In addition, RCL members became strong advocates of proper management, influencing other landowners throughout the community.

Eggville Cooperative

The Eggville Cooperative was a subunit of the Eggville Sportsman's Club (ESC), a 2,429-ha, 141-landowner membership group in Lee and Itawamba counties. Twelve landowners, with a total of 404 ha within the ESC, volunteered to participate in forming a demonstration cooperative. In the past, the ESC helped landowners gain control over their land from trespassing and illegal hunting in return for the privilege of hunting. Land use was similar to the RCL Cooperative with little management of the wildlife or forest resource.

Objectives of the cooperative were to manage for wildlife, primarily deer, and to integrate wildlife and forestry management. An additional objective suggested to landowners and sportsmen was to have management practices partially or fully paid for by the ESC. Under this system sportsmen could offer landowners additional compensation for the privilege of hunting.

Wildlife and forest management plans were written for the 12 participating landowners. Sportsmen in the ESC agreed to pay for management practices that would improve timber stand and habitat quality. Management practices paid for were 1) prescribed burning of pine (*Pinus* spp.) tracts, 2) constructing >4.8 km of firelanes, 3) seeding firelanes in a wildlife food plant, and 4) planting quail and deer food plots. Total cost paid by sportsmen for 1 year of management activities for 5 of the 12 landowners was >$4,500. In addition, in-kind contributions of sportsmen's labor in 1 year totaled >500 man-hours. Ninety percent of the Eggville Cooperative landowners preferred payment for management practices over a hunting lease payment.

Since establishment of the cooperative within the sportsmen's club, nonparticipating landowners have expressed an interest in having management plans written and improvements made on their property with the financial help of the ESC. The ESC was urged to hire a professional resource consultant to develop long-range wildlife and forestry plans for the entire 2,429 ha. The Eggville Cooperative illustrated a means by which landowners and sportsmen could work together to manage the wildlife and forest resources for the benefit of both groups.

Alcorn Cooperative

The Alcorn Cooperative consisted of 6 landowners in a 1,049-ha unit in Alcorn county. Seventy-two percent of the cooperative land was a mixture of row crop and forest land. Management of forest land for wildlife or timber production had been virtually nonexistent. The cooperative had no organizational structure because of the small number of participating landowners. The primary objective was for leas-

ing of cooperative lands for recreational hunting. Income from timber production was also an important consideration.

On-site field evaluations were made and management plans written for the 6 participating landowners. To date only 3 food plots have been established for deer. Cooperative lands have not been leased for hunting.

The Alcorn Cooperative was the least developed of the 3 demonstration cooperatives. Lack of development may have been attributed to an absence of an organization structure for the cooperative, the fact that 2 of the larger acreage participants were absentee landowners, and the lack of leadership within the cooperative. Leadership was a vital component in the development and success of the first 2 cooperatives, and without this component the Alcorn Cooperative did not accomplish established objectives.

Discussion

The 3 demonstration cooperatives illustrate the flexibility of the cooperative approach. Cooperatives allow landowners to manage more cost-effectively for the wildlife and forest resources on their property. Landowner cooperatives also provide a means by which landowners and sportsmen can work together to manage the wildlife and forest resources for the benefit of both groups. In addition, cooperatives can educate large groups of landowners toward wildlife management by allowing them to see the effects of their actions on the quality of wildlife habitat.

Several factors should be considered when trying to initiate a succeessful landowner cooperative. First, local agency personnel (county agent, county forester, district conservationist, and district game biologist) should determine the feasibility of developing a cooperative in a county and then identify landowners who would be receptive to the idea. Input from multi-agency personnel can be coordinated by the county agent.

Second, select key landowners to form the nucleus of a cooperative. These landowners can influence their neighbors to participate and at the same time provide the leadership necessary to organize and run a cooperative.

Third, inform interested landowners of all phases of the cooperative approach and available options. Place special emphasis on organization, defining of objectives, and management and marketing strategies for wildlife and forestry.

Fourth, the cooperative should have an organizational structure to provide leadership and direction for the group. Cooperatives should be organized to facilitate communication and cooperation among members. Understanding of cooperative objectives provides the foundation upon which management and marketing decisions are based and prevents disagreements in the future. Cooperative members should be willing to retain the services of a private professional resource consultant who can develop a long-range management and marketing plan for wildlife or forestry.

In some cases, the cooperative approach may not be applicable where 1) landowner interests are low or where strong local resistance is present, 2) objectives of

neighboring landowners conflict, 3) individual tracts of land are large enough to initiate an effective management program without adding neighboring lands, and 4) a lack of leadership exists among landowners. Public relations problems can also occur if cooperative members do not fully inform and cultivate the support of the local community. This and other potential problems can be prevented when a strong educational effort is made in advance.

Advantages of the cooperative approach are 1) a larger land base for management, 2) increased recreational opportunities for sportsmen, 3) increased production and quality of timber, 4) increased awareness of the value of wildlife and forest resources on small NIPF lands, and 5) increased investment in wildlife and forest management on NIPF lands. Disadvantages of the cooperative approach are 1) difficulties in agreeing on objectives among groups of landowners and 2) the efforts required to coordinate cooperative activities. Despite the disadvantages, landowner cooperatives are a means to achieve fuller use of the wildlife and forest resources on NIPF lands. The cooperative approach should be offered to groups of interested landowners as an option to increase the profit margin and recreational potential from their lands.

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