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Recreation on Large Forest Ownerships in Tennessee: Opportunities and Potential

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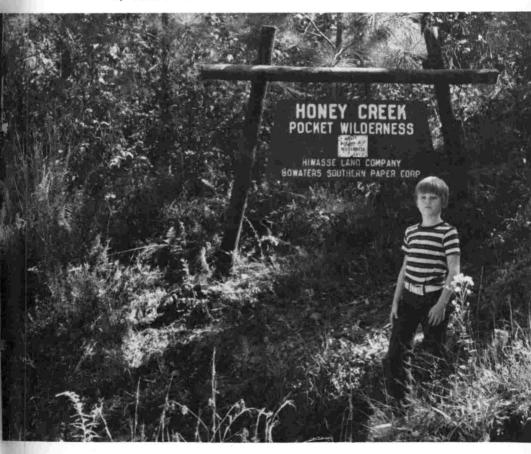
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Recreation

on

Large Forest Ownerships in Tennessee: Opportunities and Potential

by Kerry F. Schell



The University of Tennessee Agricultural Experiment Station John A. Ewing, Dean Knoxville

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RECREATION ON LARGE FOREST OWNERSHIPS IN TENNESSEE: OPPORTUNITIES AND POTENTIALS

KERRY F. SCHELL*

SUMMARY

T he large private forest ownerships of Tennessee-those that contain 5,000 acres or more-now offer many forest recreation opportunities to the general public. In most cases these opportunities are free. Hunting, both small and big game, makes up by far the greater proportion of the recreation use of these lands. Fishing streams and lakes inside and along edges of these forests is the other high-use activity. Hiking, camping, and outdoor recreation activities are generally permitted; but forest owners report that these activities are not a significant proportion of total recreation use. An absolute estimate of total use, however, was not available.

The recreation resources of the large private forest ownerships in Tennessee are about 2 million acres of forest land which are generally available for all the common forest-recreation activities. The resources are not evenly distributed over the State, but they are easily available and accessible from all parts of the State.

No inventory of specific recreation resources was attempted, but these areas in the aggregate offer a wide variety of land and forest characteristics, from the Mississippi River bottoms, to the Cumberland Plateau, to the Unaka Mountains. All the natural ingredients for high-quality forest recreation experience are available. Currently, the natural condition of the lands is virtually the sole input for the recreation experiences. Management of some private lands by the Tennessee Wildlife Resources Agency for hunting represents the only significant provisions for increasing recreation opportunities.

The problems of using forests for recreation fall into two categories. For the owners to provide facilities for recreation opportunities there must be reasonable certainty that some return will accrue to them. Also, there is a lack of knowledge among owners about the technology of recreation development and available financing. Consequently, it could be expected that when development of forest properties for recreation does take place it will be accomplished by

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other entrepreneurs already familiar with the recreation industry who will buy or lease the land necessary for development.

The second problem is the use of forest properties for recreation activities which are possible with essentially no cost to the owner, such as hunting, fishing, hiking, riding, and observation of nature. Although most owners favored this form of recreation and permitted general recreation use, there were enough comments about abuse of use privileges to suggest that restrictions on use would be forthcoming. Public agencies responsible for providing public recreation might prevent such restrictions and the possible loss of recreation opportunities with programs designed to establish good relations between recreation users and forest owners.

Specific approaches which might be considered to insure continued public recreation on private land are: 1) assistance to private owners for the establishment of permit systems for use; 2) more rigid enforcement of existing legislation which was intended to protect landowners from abuse by trespassers and invitees; and 3) total management by public agencies of certain recreation activities on private lands. Owners, representing a significant acreage, exhibited acceptance of these types of programs and looked for help from public agencies through general information and education.

INTRODUCTION

Pressures for further developing and providing outdoor recreation opportunities in the United States are increasing dramatically. Many people involved in planning and providing outdoor recreation are convinced that the private landowner must furnish a major share of additional opportunities. Since the forest environment offers many possibilities for outdoor recreation, it is logical to expect that private forest landowners will provide a large share of future requirements. There is little information about the extent of recreation opportunities that private forest landowners are furnishing, nor is the potential for expansion known.

To assess the potential for outdoor recreation in private forests, answers are needed for a number of questions. To what extent are private forest owners now supplying recreation opportunities? What is the potential for expanding recreation use of their lands? What barriers might prevent them from offering outdoor recreation opportunities? And what are the attitudes and practices of the owners with respect to recreation use of their lands?

In an attempt to answer these questions, a study of large forest ownerships in Tennessee was begun in 1967. The survey was limited to ownerships of 5,000 acres or more on the premise that the development of recreational opportunities rests to a large extent with this group. Ninety such ownerships were identified from a list of forest owners compiled by the Tennessee Division of Forestry.¹

¹Tennessee Department of Conservation. 1966. Forest landowners in Tennessee-500 acres or more by counties. Tennessee Division of Forestry. March 1966. 128 pp.

This study includes 84 of the 90. A questionnaire was used to obtain information for the study. Eighty of these were completed by a personal visit with the landowner or his representative, and the remaining four were completed by direct telephone contact.

OWNERSHIP CHARACTERISTICS

Types and Purposes

The private ownerships included in the study were classified into eight basic types, of which four were industrial and four were non-industrial (Table 1). At the outset it was expected that policies, practices, and attitudes of the owners could be related to these several types. Forty-nine of the ownerships (58%) were non-industrial, accounting for 734,000 acres (36%) of the Tennessee acreage in the study.² Non-industrial owners varied widely, including various professionals, estates, and investors. The industrial ownership group varied less. Industrial corporations not dealing in wood products were almost entirely mining companies and chemical corporations. Corporations which were wood-oriented included 13 lumber or mill operations and three pulp and paper companies. The individual and partnership types of the industrial category were lumber or mill operations.

Investment was most often given as the major purpose of present ownership, but not necessarily the original reason for acquisition (Table 2). Of the 47 owners who listed investment as the major purpose of ownership, 45 were within the non-industrial category. In nine cases the present purpose of ownership is different from the original reason for acquisition. In six of these cases the change was from wood supply to investment, in two cases from mining to wood supply.

There were too few cases of recreation investment to draw any conclusions about the relationships between purposes of ownership and these investments. However, two of the ownerships which had provided some recreation development were large, wood-oriented corporations. Their stated purpose for this investment was enhancement of public relations with users and potential users of their lands. Two other corporations provided some minimum facilities for the public, primarily for the purpose of use management, but also expecting some public relations benefits. Three ownerships had invested in recreation type developments mainly for the enjoyment of themselves and guests. One very large ownership, individually owned, was promoting fee hunting and had made some minimum investment to facilitate collection of fees. Only one ownership, an individual, had made any sizable investment in recreation with monetary return as a major objective.

 $^{^{2}}$ The total forested acreage of the 84 ownerships was 3,995,000 acres. Thirty owners had out-of-state holdings totaling 1,978,000 acres. The study results are reported on the basis of the Tennessee acres only, except that the minimum qualifying acreage of 5,000 acres could include out-of-state acres.

acteage for each i	lype	
Type of ownership	Number of ownerships	Tennessee acreage (000's)
Individual		
non-industrial	18	192
	(21.4%)	(9.5%)
Partnership		
non-industrial	18	315
	(21.4%)	(15.6%)
Corporation		
non-industrial	10	212
non-maastriat	(11.9%)	(10.5%)
al and the second	(11.070)	(10,076)
Individual	0	15
farm	3	15
	(3.6%)	(0.8%)
Total		
non-industrial	49	734
	(58,3%)	(36.4%)
Comparation industrial		
Corporation industrial non-wood oriented	13	150
non-wood oriented	(15.5%)	453
	(15.5%)	(22,5%)
Corporation industrial		
wood oriented	16	793
	(19.0%)	(39.3%)
Individual industrial		
wood oriented	4	27
	(4.8%)	(1.3%)
Partnership industrial		
wood oriented	2	10
wood oriented	(2.4%)	(0.5%)
	(2:470)	(0.578)
Total		
industrial	35	1283
	(41.7%)	(63.6%)
- · · ·		
Total	84	2017

Table 1. Types of large forest ownerships in the study and the Tennessee acreage for each type

Table 2. Primary purpose of ownership by types of large forest ownerships in Tennessee Purpose of ownership

	Purpo	se of owners	hip		
Type of ownership	Investment	Wood supply	Water power mining	Research and recreation	Total
Individual non-industrial	17		1		18
Partnership non-industrial	17	1			18
Corporation non-industrial	8		1	1	10
Individual farm	3				3
Total non-industrial	45	1	2	1	49
Corporation industrial non- wood oriented	1	1	11		13
Corporation industrial wood oriented		16			16
Individual industrial wood oriented	1	3			4
Partnership industrial wood oriented		2	11		2
Total industrial	2	22		0	35
Total	47	23	13	1	84

Size and Geographic Distribution

Fifty-seven ownerships (68%) each had less than 25,000 acres, and accounted for only 27% of the study acreage in Tennessee. The very large ownerships, eight of them and each greater than 200,000 acres, accounted for 33% of the study acreage. The size of an ownership did not appear to affect the responses to questions about policies, attitudes, and practices, except that the degree of forest management which was practiced seemed to be a function of size.³

Most of the study acreage, 81%, was within the Cumberland Plateau Physiographic Region and the Highland Rim -49% and 32% respectively. This can be attributed to the fact that these two regions are extensively forested and account for about 45% of Tennessee's commercial forests.⁴

Attitudes About Leasing and Public Acquisition

Leasing of their lands for recreation use could be one of the more important contributions by forest owners to the supply of recreation opportunities. The owners in the study were asked about their leasing practices and attitudes about leasing for recreation use. Twenty-five (30%) of them had non-timber leases in effect. Sixteen of these were classified as recreation use. There were seven mineral leases, one grazing, and one special use.

The recreation uses accounted for 103,500 acres of the 146,200 acres leased for non-timber uses (Table 3). Thirteen of the recreation leases were for hunting and accounted for all but about 200 acres of those for recreation. These were distributed over two leases for camping and picnicking and one for a group camp.

The attitudes of owners about leasing might be influenced largely by their experience with hunting use of their lands, because not only does hunting dominate non-timber leasing but all non-timber uses of the owners' forests. However, when discussing recreation use of forests with owners it was apparent that sometimes they did not classify hunting as a recreational use. Recreational use to some owners was picnicking, camping, hiking, and sightseeing; it did not include deer, squirrel, and coon hunting.

Another probable influence in attitudes about leases, especially hunting leases, is that six of the hunting leases were held by the Tennessee Game and Fish Commission (now the Wildlife Resources Agency). These included 78,000 acres. There was no monetary return from these leases, except that one owner reported that property taxes were paid. The incentive to lease was mainly regulation of

³Although a Chi-squared significance test was not a valid one because there were not enough observations per cell-five per cell are necessary to insure against exaggeration of significance—a resultant significance at the 99.5 percent level was judged adequate to infer a relationship. Conversely, confidence can be placed in the results with respect to non-significance.

 4 Commercial forests are those forest lands 1) producing, or physically capable of producing, usable crops of wood (usually sawtimber); 2) economically available now or prospectively; and, 3) not withdrawn from timber utilization through statute, ordinance, or administrative order.

Table 3. Leasing practices of owners and their attitudes about leasing for recreation uses

	Leasing practices				Attitudes toward leasing							
	For	For For recreation other uses		Libe	Only if Liberal conditions profitable		Definite objections		Total Col. 3-5			
	No. of owners	Total acreage	No. of owners	Total acreage	No. of owners	Total acreage	No. of owners	Total acreage	No. of owners	Total acreage	No. of owners	Total Acreage
		(1)		(2)		(3)		(4)		(5)		(6)
Individual non-industrial	1	500	0	0	4	35,000	12	147,000	2	10,000	18	192,000
Partnership non-industrial	0	0	5	18,200	6	128,000	10	176,000	2	11,000	18	315,000
Corporation non-industrial	4	5,500	0	0	1	45,000	9	167,000			10	212,000
Individual farm	0	0	0	0	1	5,000	2	10,000			3	15,000
Total non-industrial	5	6,000	5	18,200	12	213,000	33	500,000	4	21,000	49	734,000
Corporation industrial non-wood oriented	5	22,000	4	24,600	7	296,000	1	50,000	5	107,000	13	453,000
Corporation industrial wood oriented	6	75,500	0	0	8	426,000	4	201,000	4	166,000	16	793,000
Individual industrial wood oriented	0	0	0	0	3	22,000	0	0	1	5,000	4	27,000
Partnership industrial wood oriented	0	0	0	0	2	10,000	0	0	0	0	2	10,000
Total industrial	11	97,500	4	24,600	20	754,000	5	251,000	10	278,000	35	1,283,000
Total	16	103,500	9	42,700	32	967,000	38	751,000	14	299,000	84	2,017,000

hunting and improved general law enforcement by the agency.

The returns from other hunting leases ranged from 5e per acre for 12,000 acres (\$600) to \$150 per year for 50 acres (wild hog hunt). The leases for camping and picnicking were to groups at \$1.00 per year. The group camp lease consideration was reported as minimal.

Most responses by owners about leasing their lands for recreation were favorable (Table 3). When asked if they would lease their lands for recreational use and under what conditions, 32 said they would lease and would consider any proposition (liberal conditions); 38 wanted to lease at a profit; and 14 had definite objections to leasing and said they probably would not lease for recreational uses.

Fifty percent of the 2,000,000 acres represented in the study are potentially available for recreation use. This is important if public management of private lands is economically and politically a better solution to the supply of forest lands for recreation purposes than is public acquisition in fee simple.

Responses to a question about attitudes among the owners to public land acquisition for recreation programs are shown in Table 4. Interpretation of the "no comment" responses is difficult. It would be hypothesized that a significant proportion of these responses were proxies for the "unfavorable" response. If such were the case, more than half of the owners would be opposed to public acquisition of land for recreation programs. It is highly probable that these responses about public acquisition were in fact responses reflecting the owner's feeling about public acquisition of his own land in contrast to public acquisition generally.

In response to another question few owners suggested any alternative to public acquisition of land for recreation. Only 30% (26 owners) had any comment. Three suggested easements rather than fee simple title, seven suggested leases, and 16 said more progressive attitude towards recreation development and programs would be the best deterrent to public land acquisition for such purposes. The categories of responses to this question were well distributed over the different types of ownerships.

Attitudes About Recreation

Owner's attitudes toward use of their property for outdoor recreation were determined by 1) their response to questions about trespass and use, leasing policy, and the permit and fee system, and 2) by their apparent willingness and enthusiasm in responding. Attitudes were classified by the enumerator immediately after an interview and were necessarily subjective. Table 5 shows apparent attitudes by types of ownerships. The 41 owners who were somewhat enthusiastic and knowledgeable about outdoor recreation development and use, control 994,000 acres (50%) of the study area available for recreation in Tennessee. The 23 others who were somewhat less enthusiastic, but not neutral or opposed, account for an additional 442,000 acres.

A response which is somewhat associated with attitude about recreation, but which received little weight in the subjective evaluation of attitudes during

	;				
Type of Ownership	No comment	Unfavorable	Favorable	Open- minded	Total
Individual Non-industrial	5	8		5	18
Partnership Non-industrial	6	7	3	2	18
Corporation Non-industrial	2	3	2	3	10
Individual Farm	1	1		1	3
Corporation industrial Non-wood oriented	7	3	1	2	13
Corporation industrial Wood oriented	6	8		2	16
Individual industrial Wood oriented	1	1		2	4
Partnership industrial Wood oriented		1	1		2
Total	28	32	7	17	84

Table 4. Attitudes of owners towards public land acquisition for recreation programs

the study, is the one giving reasons for not investing in recreation development (Table 6). The four most frequent responses—"no demand", "lack of financing", "administrative problems", and "low on priority list of investments" are obviously very closely associated. In themselves, these responses can not be defined as attitudes because they are functions of conditions that existed. Nevertheless it seems that these expressed reasons for not investing in recreation development do in fact have a significant influence on attitude.

Attitudes about recreation development also seem to be related to the owner's knowledge of public assistance (mostly federal) for such development. Such information is available in most counties through various agencies such as the Soil Conservation Service, Agricultural Stabilization and Conservation Service, and Farmer's Home Administration. It could be expected that if owners were enthusiastic about recreation development on their lands they would inquire about such assistance possibilities. However, the response to a question about knowledge of public programs also indicate that such opportunities are probably not well publicized (Table 7).

Table 5. Apparent attitudes of landowner respondents about outdoor recreation development and use in general

	Attitudes of owners					
Ownership type	1	2	3	4	5	Total
			·····	avorable		-)
Individual Non-industrial	1	3	2	4	8	18
Partnership Non-industrial		4	2	4	8	18
Corporation Non-industrial			2		8	10
Individual Farm				2	1	3
Corporation Industrial Non-wood oriented		2	1	4	6	13
Corporation industrial Wood oriented		1	2	7	6	16
Individual industrial Wood oriented				2	2	4
Partnership industrial Wood oriented					2	2
Total	1	10	9	23	41	84

1 - Definitely not interested

2 - Not favorable, more or less not interested.

3 - Neutral.

4 - Some interest, not very knowledgeable.

5 - Interested, enthusiastic, somewhat knowledgeable.

				Attitu	des of c	wners		
Type of ownership	1	2	3	4	5	6	7	Total
Individual Non-industrial		4	1	1	8	4		18
Partnership Non-industrial	1	6	4	2	5			18
Corporation Non-industrial		1	2	4	1		2	10
Individual Farm			1		2			3
Corporation industrial Non-wood oriented			1	5	6		1	13
Corporation industrial Wood oriented		5	1	2	6	1	1	16
Individual industrial Wood oriented			1		3			4
Partnership industrial Wood oriented		1			1			2
Total	1	17	11	14	32	5	4	84
 Abuse and misuse by the public. No demand, Lack of financing. Administrative problems. 	bublic. 5 – Low on priority list for investments. 6 – Upper age bracket 7 – These ownerships had recreation investments.							

Table 6. Reasons for not investing in recreation development

Table 7. A measure of knowledge of public programs assistance for development of recreation resources by ownership type

	Knowledge of public programs						
Type of ownership	None	Some	Considerable	Total			
Individual Non-industrial	6	9	3	18			
Partnership Non-industrial	6	11	1	18			
Corporation Non-industrial	1	6	З	10			
Individual Farm	2	1		3			
Corporation industrial Non-wood oriented	7	5	1	13			
Corporation industrial Wood oriented	4	10	2	16			
Individual industrial Wood oriented	3	1		4			
Partnership industrial Wood oriented	1	1		2			
Total	30	44	10	84			

RECREATION ON LARGE FOREST OWNERSHIPS

Present Use

An attempt was made to estimate the extent to which land in the study area was used for recreation. Early in the survey, however, it became apparent that such estimates would be unreliable. In most cases respondents had no idea of use levels in terms of visitor days, hours, or even visits **per se**. However, an estimate was made of acreages available for various recreation activities and is reported in Table 8.

This compilation could be misleading, of course, because it does not provide a measure of rate of use. For example, a 1,000-acre tract might have 300 hunter-days of use, while a 10,000-acre tract might have no more than this, or even less. With few exceptions, recreation uses of the ownerships were those of an extensive nature, e.g., hunting, fishing, and hiking.

Almost 2 million acres of land is potentially available for recreation use among the large forest ownerships in Tennessee. However, not all of it is unconditionally open to use. Only parts of some ownerships are available for given activities.

Some owners prohibit all uses. Five of the owners reported that recreation use was prohibited on all of their lands, but three of them said recreation use did occur. This indicates some passiveness about trespass, and the no-trespass policy in some cases is probably for legal protection. At least four owners reported that they had been sued for negligence by persons who had been injured on the property. Thus the no-trespass policy is understandable.

There would seem to be a trend toward more restriction of recreation use by the owners. Sixty owners (71%) indicated a tendency toward a fee or permit system. Nineteen of these favored a fee system and 41 favored only a permit. These 60 owners control 1,317,000 acres, about 65% of the study area in Tennessee.

Dissatisfaction with use of their forest lands for recreation was expressed by 54 owners. Twenty-six thought that their ownership rights were abused. Another 23 were concerned with fire danger and litter problems. The litter problem received considerable emphasis during conversation with owners.

Somewhat paradoxically to the responses reported above, when the owner was asked if he was satisfied with present forest recreation use on his property and in the locale, 17 were highly favorable, 53 favorable, 13 unfavorable, and one highly opposed; thus only 17% were dissatisfied. When asked for suggestions to improve ownership-user relationships, 50 owners responded "no comment". Thirteen owners suggested regulation of users and better law enforcement by public agencies. Fourteen others advocated public relations programs by owners and public agencies.

Recreation Amenities

This survey provided no inventory of physical recreation resources such as

Table 8.	Number and percent of owners providing forest lands for recreational	
	pursuits	

	Owr	ners	Acreage		
Recreation Activity	Number	Percent	Acres	Percent	
Hunting only	29	35	476,000	24	
Hunting and fishing	28	34	752,000	38	
Hunting, fishing,					
camping & hiking	21	26	333,000	17	
Wide variety	_4	5	405,000	21	
Total	82 ¹	100	1,966,000 ²	100	

¹Two owners of 5,000 acres each claimed no recreation activity.

 2 Total acreage of study ownerships available in Tennessee for recreation use of some type.

the number of areas suitable for campgrounds or the number of unique natural phenomena. However, the response of owners about the potential of their own and surrounding lands for a recreation industry creates an impression that the study area could support a great increase in outdoor recreation activity.

Within the large forest ownerships of Tennessee there are many outdoor recreation amenities such as unique vistas, gorges, mountain streams, and cool coves. Most of the owners, 69%, believed their lands were suitable for a wide variety of recreational activities rather than a more restricted use (Table 9). They also gave high evaluations of their areas as a recreation resource (Table 10). Two-thirds of them thought the locales of their ownerships had potential for a wide variety of recreation experiences.

Table 9.	Owners ³	concept of the	suitability of	their forest	lands for recreation
----------	----------------------------	----------------	----------------	--------------	----------------------

Category	Number of owners	Acres available for recreation
Suitable for a wide		
variety of recreation	58	1,471,000
Hunting and fishing only	8	141,000
Hunting only	7	170,000
Hunting and camping	11	184,000
	84	1,966,000

Table 10. Attributes of the Tennessee forest ownership locales, as identified by the owners, which would support the development of forest recreation resources

Attributes	Number of owners identifying
Lakes and other public facilities	3
Private recreational development and facilities	3
Desirable climate	1
Aesthetics and scenery	2
Forests only, mediocre otherwise	4
Potential for wide variety of recreational experiences	56
Potential for limited forest recreation development	11
Complex of public and private recreational facilities	4
Total	84

PRIVATE FOREST RECREATION IN TENNESSEE: CONTRIBUTIONS, PROBLEMS, POTENTIAL

Owners of private forest lands in Tennessee, as a group, have not made any great monetary investment for providing recreation opportunities. On the other hand, the policies and practices of this ownership group have not hindered the development of outdoor recreation in Tennessee. It is a passive-type situation. The survey reveals a natural resource of great magnitude for outdoor recreation development. Current owner attitudes and actions, however, do not indicate that they will initiate a significant recreation development program in the near future.

The results of the survey indicate that there simply is not enough pressure from recreation participants on owners of private forests or the financial returns are not adequate at this time for them to develop their properties for recreation use. This lack of pressure, however, is not due to low participation in recreation throughout the state but, in part at least, to the provision of many recreational opportunities and facilities by the public sector, e.g., U.S. Corps of Engineers, U.S. Forest Service, National Park Service, Tennessee Valley Authority, and Tennessee State Parks. An important aspect of the public supply is the fact that it is generally available at little or no cost. Such competition could be insurmountable for a private entrepreneur who might develop recreation facilities in the proximity of public areas offering similar services. There are some situations, such as the Gatlinburg, Tennessee, area, and the Great Smoky Mountains National Park, where public and private development are complementary. However, these situations are exceptions.

Outdoor recreation development by the public sector and the expectations of further such development did influence the responses of some owners to the questionnaire. These influences were evident in their descriptions of the recreation possibilities for their locale, in the discussion of fees, and in the discussions of further land acquisition by the public sector. However, owners, in response to the query about recreation attributes of their locale, emphasized more the positive contributions by public recreation development than the possible adverse effects of further land acquisition by the public sector.

Tennessee has a resource base upon which the recreation industry can build. This is especially so in the eastern part of the State where the National Park Service, the U.S. Forest Service, and the Tennessee Valley Authority have provided developments. The central and western parts of the State are not too different with development situations enhanced by the Corps of Engineers in the Cumberland River Watershed and Tennessee Valley Authority reservoirs in the western portion of the Tennessee Valley. Well-distributed throughout the State are the Tennessee State Parks which are experiencing a readily apparent growth in development and quality. If the attitudes of the study owners are an indication, an optimum for private investment will not persist if development by the public sector is increased further and significantly.⁵

Although lack of effective demand appears to be the major deterent to the development of recreation resource by owners of large forest tracts, there are other influencing factors. While certain public agencies do make technical assistance available to property owners, these programs are somewhat limited in scope. Assistance is available for farm pond and small-lake construction, for farm home vacation-type developments, and even for development of marinas. However, there is only limited help available for the development of hunting, stream fishing, forest camping, hiking, nature trails, and swimming areas. Questions which arise about the merits of public assistance for private development might be more readily resolved by asking what benefits accrue to society rather than asking if a given entity **per se** merits public assistance.

Partial public management and development of private land should be considered in providing outdoor recreation opportunities to meet the predicted demand in Tennessee. Precedent for such arrangements exist in leases made by the Wildlife Resources Agency-formerly the Tennessee Game and Fish Commission-of certain private forest properties. Also, results of this survey offer evidence of the receptivity to such arrangements by large forest ownerships.

Public management of private lands has some mutual benefits for the public and private sectors. The public is relieved of the burdens of acquisition and perpetual management of the property and there would be no total and permanent loss of tax base. Of course, limitations on land use by the private owner

⁵During 1970-71, in Tennessee, private investment in forest recreation, specifically second home sites and campgrounds, increased at a significant rate. On the Cumberland Plateau at least six such developments were established. In the Gatlinburg Area an equal number were established. Some of these are a deluxe resort type of establishment and others can be classed as satellite campgrounds to the publicly owned campgrounds. All were carved from forest lands. There is little doubt that the private compground development in the Gatlinburg Area is encouraged by the National Park Policy to limit further campground development within the Park. would be necessary; e.g., no mining or other operation which would destroy the environment necessary to the recreation activities planned for the area. Also, in the case of taxes, tax reduction or elimination could be a form of compensation for lease arrangements. Benefits to the landowner could be greater control of all activities on the property by way of adequate enforcement of regulations, probably better access to the property, increased returns, and reduction of the probability of public acquisition of the entire tract.

The forest owners of Tennessee are stewards of a resource which may ultimately be required by society for recreation. There are different methods by which this may be provided. That it could be by the profit motive is a possibility if the economic system reacts quickly enough to be efficient. A second alternative is action by a public agency to effect the adjustment by subsidy, leasing, development and management, or fee simple acquisition and subsequent development. A third, but much less probable alternative is the provision of recreation opportunities by forest owners at monetary cost to themselves in the short run. The motives for this third alternative could be acceptance of social responsibility, goodwill and public relations, and the insurance against public acquisition. This third alternative could become a more likely course as forest owners accept certain responsibilities and the consequence of not doing so, and also recognize that long-range profits from recreation are possible.