

**The Georgia Public and its Forest:
Attitudes and Knowledge Regarding Forest Resource Use**

by

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INTRODUCTION

Continued economic growth and the resulting encroachment on previously undeveloped land and forests has caused increasing public concerns. These include issues of sustainability, wildlife protection, wetlands conservation, and others. In many areas, this has led to concerns that increasing levels of regulation may be coming for forest landowners. The purpose of our study was to determine what the Georgia public wants and what it knows about its forests through a series of attitudinal and knowledge questions. It is hoped this information will identify emerging public concerns and allow the forest sector to better address the most contentious or misunderstood issues concerning forest management and use.

There have been a number of environmental polls, on everything from oil exploration to scenic interpretations, but relatively few on forest resource issues in the Southeast, and Georgia in particular. Considering Georgia's changing demographics and its leading role in the timber and wood products industry, it represents a good opportunity to study public opinion and knowledge regarding forest issues.

Several factors have led to Georgia's current position as a leading timber producer, including the industry's shift from the Pacific Northwest to the South, its conducive regulatory and labor situation, and the conversion of millions of acres of farmland to forest which began in the 1930s. These changes raised development and growth rates and led to the establishment of the infrastructure necessary to support an expanding timber products industry.

While this growth in the forest sector has occurred, the result has been a widening gap between rural and urban populations. As a result, Georgia's demographic structure has shifted to represent a more concentrated urban population with a smaller, diffuse rural population. It is a diverse population that appears to be increasingly concerned about the environment.

Part of the campaign to ensure the viability of the forests and the industries that depend on them was found in the 1989 proposal of the Conservation Use Amendment, or as it was known, Amendment 3. Amendment 3 was created and promoted by a coalition of forestry and

conservation concerns who worked cooperatively to redesign the law to tax timber only at the time of harvest and provide property tax incentives for forest land protection. The passage and continued support of Amendment 3 gave an indication of Georgians' positive attitudes regarding forests and forest owners.

METHODOLOGY

A random sample of Georgia residents, 18 years of age or older, was taken for a telephone survey. The surveys took approximately 15 minutes to complete and were administered from April 10 to May 16, 1996, between 5:30 and 9:30 p.m. on the first four working days of each week. To ensure that the survey was administered to a representative sample of the Georgia population, phone numbers and replicates were obtained from Survey Sampling, Inc. The interviewers employed the Standardized Survey Interviewing style of questioning in order to ameliorate the introduction of interviewer bias. Out of 1192 calls, 861 completed surveys were recorded. Seventeen surveys lacked complete data, leaving 844 for the final analysis or a 71% response rate.

The issues covered by the questionnaire included various silvicultural practices, perceptions of private and public forest management, the proper balance between the environment and the economy, and the role of government regulations in forest management. The responses were analyzed according to various demographic characteristics, such as age, gender, education level, race, residence, and forest land ownership.

The survey was based on two earlier surveys, one by Bliss et al. (1997) in conjunction with Auburn University, and one administered by the Georgia Forestry Association in 1989. Final changes, question design, and coding were implemented by Valdosta State and University of Georgia personnel.

The completed surveys were coded and then entered into a computerized database management system. Response frequencies and population percentages were derived from the database and form the summary statistics tables used in our analysis. Valid percentages were created by excluding the Don't Know/Refused/Not Applicable responses, which we defined as

non-responses. Only valid percentages were used in the statistical analysis, except in situations where the number of non-responses was unusually large.

RESULTS

A summary of the survey demographics is found in Table 1. The majority (62%) of respondents were female. Respondent ages were distributed in a rather uniform fashion with 24% less than 30 years old, 48% between 30 and 50 years old, and the remaining 28% over 50 years old. A total of 87% of the sample had graduated from high school, and 30% had completed college or continued further. The survey was heavily represented by Caucasians, who accounted for 70% of the sample. African-Americans made up 26% of the sample and those in the “other” category comprised the remaining 4%. Urban areas represented the majority with 55% of the sample residing in urban and suburban areas, while the remaining 45% were classified as rural. Only a very small percentage, 16% of the sample population, were designated as forest land owners.

Table 1. Survey Demographics

Characteristics**	Respondents			
	n	%	Valid n	Valid %
Age				
Under 30	199	23.6	199	23.9
30 - 50	400	47.4	400	48.0
Over 50	235	27.8	235	28.2
DK/RF/NA(1)	10	1.2	0	0.0
	844	100.0	834	100.0
Gender				
Male	311	36.9	311	37.8
Female	512	60.7	512	62.2
DK/RF/NA(1)	21	2.5	0	0.0
	844	100.1*	823	100.0
Education				
Some H.S.	107	12.7	107	12.9
H.S. graduate	233	27.6	233	28.0
Some post-secondary	239	28.3	239	28.8
College graduate	252	29.9	252	30.3
DK/RF/NA(1)	13	1.5	0	0.0
	844	100.0	831	100.0
Race				
White	569	67.4	569	69.6
African-American	213	25.2	213	26.0
Other	36	4.3	36	4.4
DK/RF/NA(1)	26	3.1	0	0.0
	844	100.0	818	100.0
Residence				
Rural	372	44.1	372	45.1
Urban	450	53.3	450	54.5
Other	3	0.4	3	0.4
DK/RF/NA(1)	19	2.3	0	0.0
	844	100.1*	825	100.0
Forest Land Owner				
Yes	130	15.4	130	15.6
No	704	83.4	704	84.4
DK/RF/NA(1)	10	1.2	0	0.0
	844	100.0	834	100.0

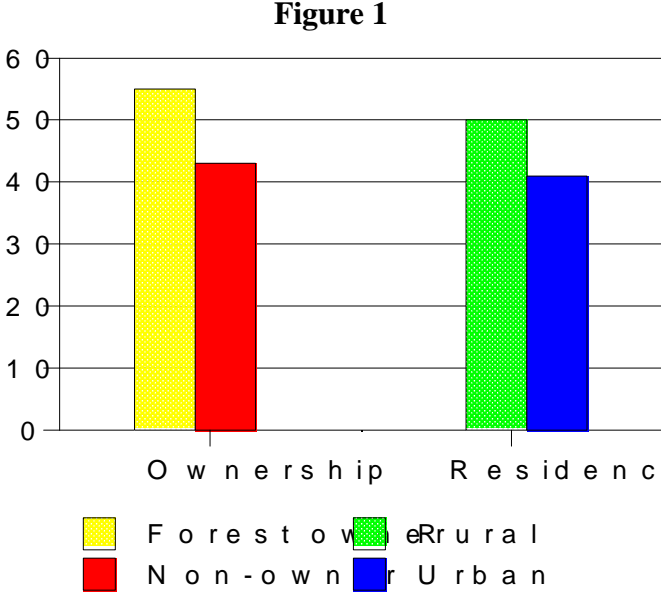
*Result of rounding error.

**Derived from survey questions 1, 2, 37, 38, 40, & 43.

1. DK/RF/NA includes Don't Know, Refused, or No Answer.

These numbers closely mirror the actual demographic statistics for the state of Georgia, with the exception of the high representation of women and rural residents. The actual division among men and women is closer to 48% and 51%, respectively, while the percentage of urban residents is closer to 63% of the population.

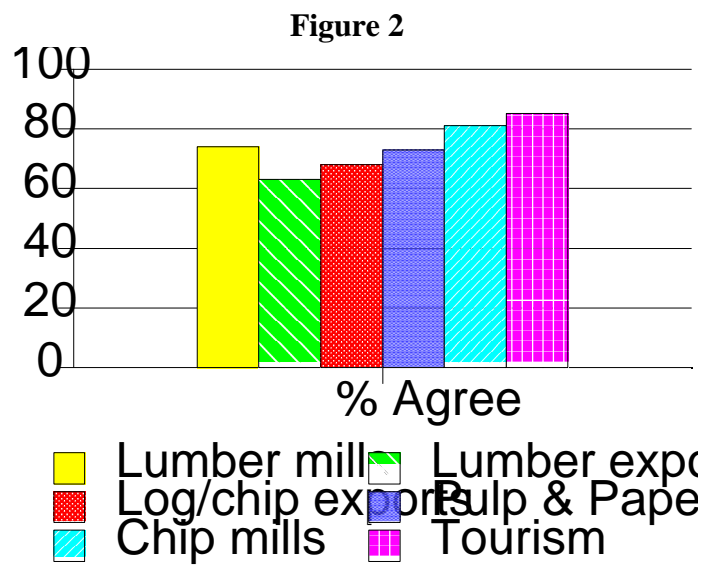
To the contradiction of many other environmental surveys, our results demonstrate that the majority of Georgians are not overly concerned with the way forests in Georgia are being treated. The only two demographic characteristics that are significantly correlated with concern are residence and forest ownership. Somewhat surprisingly, we found that significantly more forest owners and rural residents are concerned with the treatment of Georgia’s forests than are urban dwellers (Fig. 1).



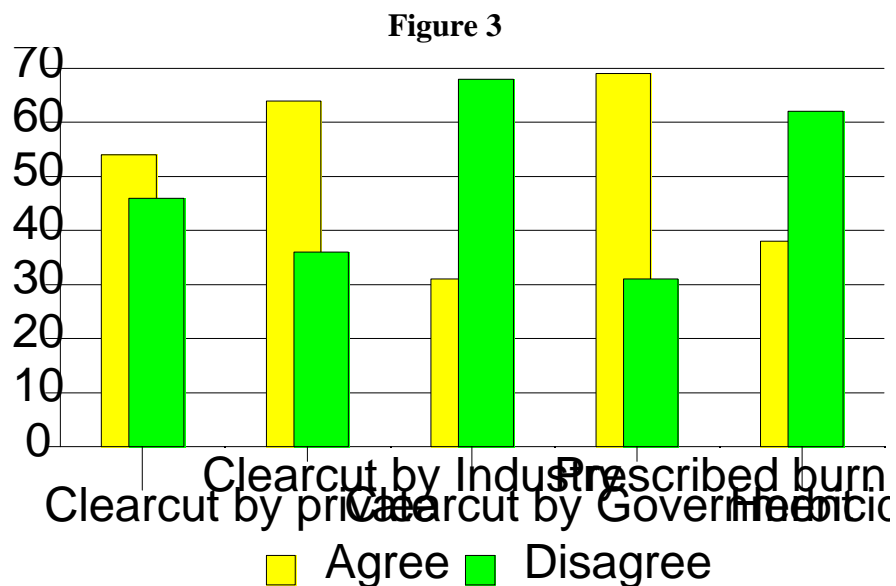
While a majority are not concerned about the state of the forests, 54% of the respondents felt that the amount of pine coverage in their local area was decreasing, and 63% felt that the land occupied by hardwood forests in their local area was decreasing. This conforms with the fact that less pine being replanted than harvested in all areas of the state. However, hardwood volumes are increasing statewide, including areas where it is intensively harvested for pulp and paper production.

Only 74% of respondents have seen or heard of clearcutting. After explaining to the remaining 26% who did not know what clearcutting was, the respondents were then asked if they thought clearcutting should be allowed on private, commercial, or government owned land. Commercial land had the highest number of positive responses with 64% agreeing with the practice of clearcutting. On privately owned land, 54% of respondents felt that clearcutting should be allowed. The number dropped considerably for government owned land, with only 31% agreeing with clearcutting. When the respondents were told to assume that the trees would grow back, the answers changed in an unexpected manner. Rather than increasing, the percentage of those who agreed with the practice of clearcutting decreased for all three types of land ownership and the percentages of non-responses increased dramatically. This indicates a substantial uncertainty by the public of the implications of silvicultural practices.

In addition to clearcutting, respondents were asked their opinions on two other silvicultural methods, prescribed burning and herbicide use. Prescribed burning was viewed more favorably with a 69% majority agreeing with its use. The use of herbicides in site preparation was less favorably viewed, with only 39% of the sample agreeing with its use (Fig. 2).



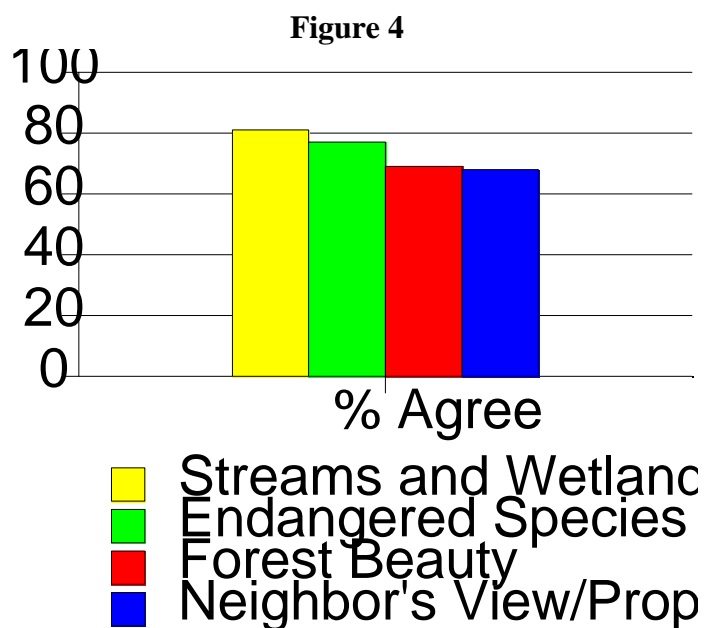
When asked which had precedence, the environment or the economy, 73% of the respondents felt that both were important but that the environment should come first. Only 13% said that both were important but the economy should come first. When asked how they viewed trees, 71% of the respondents agreed that trees are like any other crop and should be harvested and replanted to provide consumer goods. In accordance with this relatively pro-economic view, the majority of respondents favored development of all the forest industries listed in Figure 3. The number in support of the development of such industries ranged from 63% supporting the exportation of cut lumber, to 85% supporting the development of tourism.

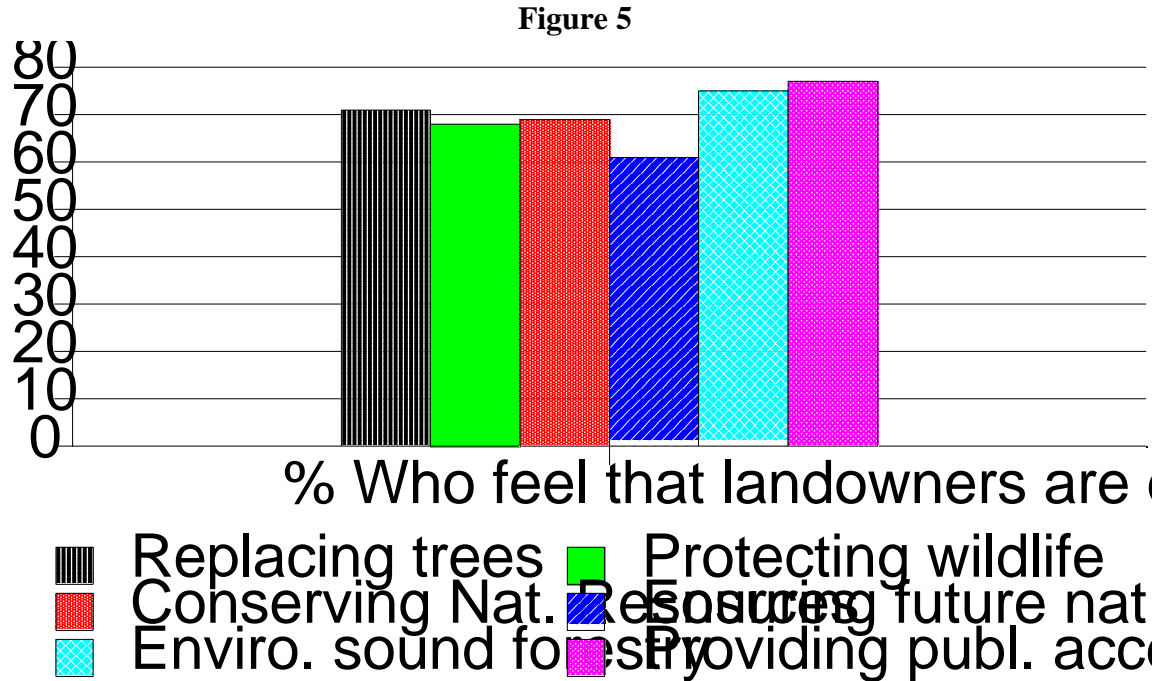


Private property rights were secondary when compared to possible environmental harm, and 67% felt that private property owners did not have the right to do as they pleased with their forests regardless of environmental consequences. An 89% majority stated that private property rights were important only if they do not harm the environment. Correspondingly, 85% said that private property rights should be limited if necessary to protect the environment. However, 78% of respondents felt that forest landowners should be compensated for economic losses caused by government regulations that prevented them from harvesting their trees. This points out that

although the public feels private landowners should be regulated, they also feel landowners should be compensated for any financial hardship that they incur by adhering to the rules.

When asked if there should be more state and local timber regulations 47% said yes, and when questioned about government regulations for specific purposes, the percentage of positive responses increased, with a large majority of the public supporting regulation of harvesting on private land for a variety of reasons (Fig. 4). This seems surprising when the majority of respondents stated that they thought landowners were doing a good job in several different land management scenarios.





Overall, Georgians had a strongly positive view of the job landowners are doing in replacing trees after the harvest, protecting wildlife, ensuring enough natural areas for the future, conserving natural resources, growing and harvesting trees in ways that are environmentally sound, and making land available for the public to enjoy (Fig. 5).

A majority of 58% of the sample felt that timber land owners pay a fair share of property taxes, and 28% said they pay too much. The majority of respondents were not able to estimate the percentage of land owned by small non-industrial owners and commercial land owners, with 62% and 63% respectively, giving Don't Know or non-response answers (Fig. 6). In reality, private non-industrial forest owners hold about 68% of Georgia's timber land, industry holds 25%, and government owned land makes up the remaining 7%.

Figure 6

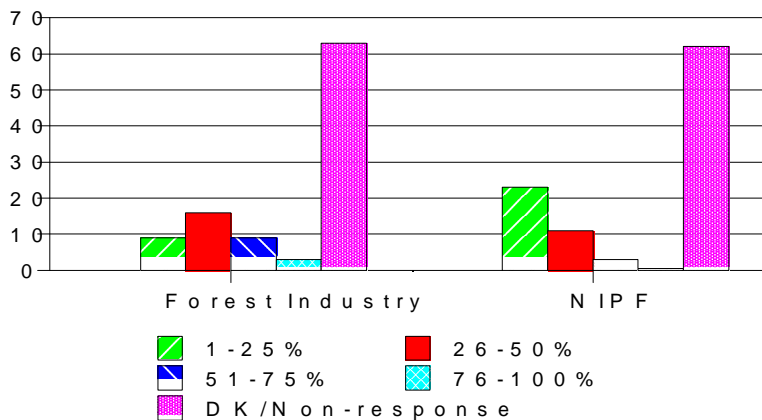
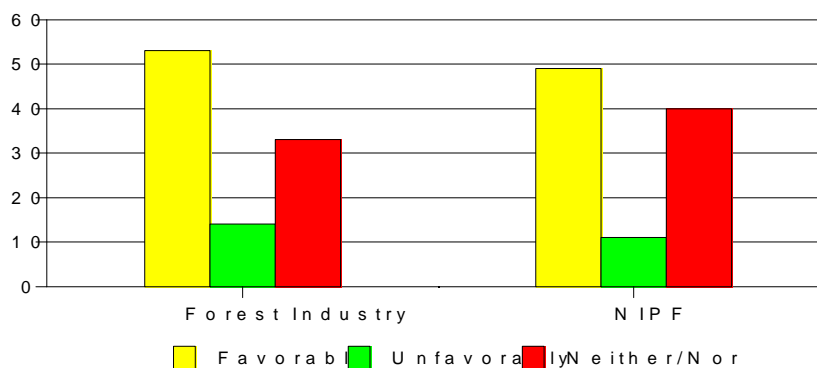


Figure 7

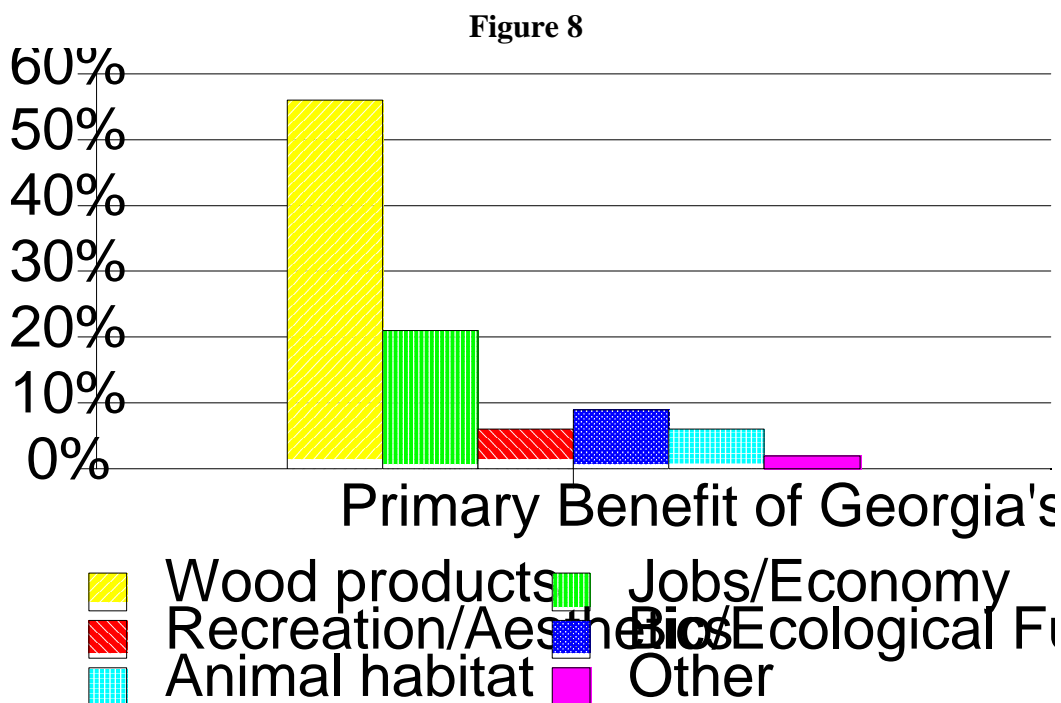


When asked how they regard timber land owners, 49% responded favorably, 11% unfavorably, and 40% did not have an opinion either way. Similarly, 53% regarded the forest products industry favorably, 14% unfavorably, and 33% said they did not have an opinion either way (Fig. 7).

As we hypothesized, a significantly higher proportion of forest owners than non-forest owners had a favorable opinion of both timberland owners and forest products companies. The same percentage of forest owners (62%) have a favorable opinion of both industrial and non-industrial timber landowners, but significantly fewer non-forest owners, 52% and 46% respectively, have favorable opinions of such forest owners. Men also comprise a larger proportion of the favorable responses than women, but the difference is significant only in

relation to timberland owners. The high number of neutral responses regarding public opinion of timberland owners and the forest products industry may indicate that a considerable number of people do not feel they know enough to even give an opinion, let alone a critical assessment.

When questioned about the primary benefit of timber and forest land in Georgia, the majority of respondents (56%) cite building materials and wood products, with paper as the most often cited product. The second most popular response (21%) includes forestry's impact on the economy and its provision of jobs (Fig. 8).



DISCUSSION

Our results indicate that many conclusions of previous environmental surveys do not always apply to Georgia. This is perhaps due to Georgia's strong position in the forest products industry, or its changing demographic scheme. A surprisingly positive result, which contradicts the results of many other surveys, is that a majority of respondents do not express great concern regarding the treatment of forests in Georgia. Almost every survey and article dealing with the

environment or natural resource issues reports a consistent, strong theme of environmental concern.

A possible explanation for this finding may rest with the wording of our survey question; it simply asks if respondents have ‘any concerns about the way forests in Georgia are being treated.’ Thus, the definition of the term ‘concern’ may be misconstrued. It can refer to a vested interest in forest issues, or apprehension about the management of the forests. Therefore, the response to the concern question may depend on the respondent’s interpretation to the question. For our purposes, the apprehension definition was assumed to be the one chosen most often by the respondents, and it formed the basis for our analysis.

It is likely that as a forest products leader and the largest timber producing state in the Southeast, the public associates the forest industry’s success with sound management practices. Support for this can be found in figure 5, where the majority of people feel forest landowners are doing a good job in several different areas of forest management, from replacing trees after harvest to protecting wildlife. The majority of the sample also supports the future development of a wide variety of forest industries, from the construction of lumber mills to the construction of chip mills. The fact that almost two-thirds of the state is forested could be another explanation for the lower than expected level of concern. The relatively large amount of forest cover, combined with a variety of public outreach programs may also contribute to a more positive image.

While a considerable majority of the sample is supportive of the forest products industries, approximately one-third of the respondents said that they did not have either a favorable or an unfavorable opinion of timber landowners and the forest products industry. These numbers may indicate that while a sizable majority are relatively satisfied with forest management in Georgia, many do not know who to attribute that success to - forest industry, private landowners, or government regulation. Another possible conclusion is that those who fall within the neutral category represent a group that could best benefit from future education efforts.

In contrast to high levels of support for current forest management practices and the rather pragmatic definition of trees as similar to an agricultural crop, there is also a high level of support for current and future government regulation of harvesting on private forest land. Over 47% of the sample feel there should be more regulations in Georgia. When questioned on what types of new regulations were needed, the responses focused on harvesting limits, regeneration guidelines, and enforcement issues. However, it is not clear as to how intense the public feels about the implementation of new regulations.

It may be worthwhile to clarify what regulations currently exist, how these are being adhered to, and by whom. There is substantial misconception regarding who owns the majority of forest land in Georgia. It may be possible that if the majority of people feel the land is being managed well, but do not realize that private non-industrial landowners are responsible for a good deal of that success, then that misconception may account for private landowner's relatively low approval rating. The respondents' perception of forest land ownership is the opposite of what it is in reality. Over 60% of the respondents could not give any answer to the question regarding percent of forest ownership and most of those who did respond had the ratio incorrect.

It is this apparent paradox that leads us to believe that the public is not confident in their understanding of forestry in Georgia. The uncertainty present in their responses regarding where to allow clearcutting when they are told the trees will grow back, the partitioning of forestland ownership, and their opinions of forest products companies and private timberland owners, all seem to suggest that there are a number areas where public education and information may be needed.

We hypothesized that rural residents and forest owners would regard forest management practices more favorably than urban residents and non-forest owners. In both cases our hypotheses have been shown to hold true. Forest owners and rural residents consistently exhibit more support of silvicultural practices and private property rights, and considerably less support for government regulation of forest practices. Presumably they are more aware of forest

management practices because they are familiar with them through personal associations, forest industry location, employment opportunities, and a closer affinity with the land. This may also explain why they exhibit more concern about the forests. Their familiarity with the land allows them to see both the good and the bad forest practices. In addition, they are more likely to be affected by any new forest regulations.

Although Bliss et al. (1997) caution against the assumption that forest owners and non-forest owners are two distinct and different groups of people, we do see some indication of just such a result in our study. However, it should be noted that many of the deviations, though significant, do not represent major differences on all of the issues present in the survey. Often, the majority of both groups have the same response and it is the degree of support or non-support that differs significantly. This same relationship applies to all the significant differences we found.

Though the majority of respondents report a knowledge of clearcutting, the number of people who have never seen or heard of it seems fairly high (26%), and lends credence to our hypothesis that many Georgians possess incomplete knowledge of forest practices. We found that respondents who are female, over 50, and urban residents, are more likely to have never seen or heard of clearcutting.

It may be necessary to assess the forest products industry's methods of disseminating information, and the methods employed by environmental groups as well. By doing this, it could be possible to see how people pick and choose what they believe is accurate and relevant information used to frame their decisions. These same methods can then be used to clarify misconceptions or reach target audiences that display a lower level of comprehension regarding environmental and forest issues.

To summarize, our results show that the general public has a fairly positive image of people within and associated with the forest products industry. A majority also have a knowledge of and give support for more forest management practices than we had anticipated.

Although this study points to some possible areas that should be addressed by those in the forest industry, it appears that those employed in the forestry sector have begun to realize that informing and involving the public is necessary not only for good public relations and improved community cooperation, but also for the long term maintenance of their ability to manage.

Literature Cited

Bliss, J., S. Nepal, R. Brooks, and M. Larsen. 1997. In the Mainstream: Environmental Attitudes of Mid-South Forest Owners. *S.J.A.F.* 21(1):27-43.