27 Forest Certification in the Heart of Dixie: a Survey of Alabama Landowners

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Introduction

The forest certification discussion in the USA and elsewhere has tended to focus on those parts of the forestry sector that are furthest along the chain of custody: consumers, retailers and wood processors. The ultimate source of much of the forest sector's raw materials – the forestlands that are in the hands of private landowners – has received less attention. If certification continues to gain momentum, however, the non-industrial private landowners who manage 58% of the country's 195 million ha of commercial forestland may also be asked to certify their lands. Understanding the attitudes of this group toward the certification concept and current issues relating to certification is important for all groups involved in the process, from the landowners themselves to certifiers to industrial forest landowners.

The US state of Alabama provides an interesting case with which to study these issues. The forest industry is the state's largest manufacturing sector, contributing more than $14 billion per year to its economy (Glover and Jones, 2001). Alabama contains 9 million ha of private forestland, with non-industrial private owners controlling 70%, industrial private owners owning 25%, and 5% in public ownership (USDA Forest Service, 2001). In 1997, 67% of the roundwood produced in Alabama came from non-industrial private forestlands (Howell *et al.*, 1999). The attitudes of non-industrial private landowners toward certification will play a large role in the future of forest certification in the state and region.

The special challenges that forest certification poses for non-industrial private landowners in Alabama and elsewhere have been documented by both academics and concerned landowner groups (see Thornber *et al.*, 1999). Cost is usually cited as the main challenge, as non-industrial private landowners tend to have smaller forest tracts and less financial capital to cover the direct costs of certification, which are proportionately higher than on larger tracts due to economies of scale (Scientific Certification Systems, 2000). Certification programmes operating in the USA and elsewhere have taken measures to try and assist landowners in meeting these challenges, usually by trying to decrease costs through processes such as group certification. The relevance of these various perceived costs of certification – as well as perceived benefits – will doubtless play a large role in future certification trends.

In addition to costs and benefits, cooperation and communication are major issues requiring investigation. The degree to which landowners are

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willing to work together may affect the success of some attempts to decrease their costs (e.g. group certification). The level of trust between forest landowners and organizations involved in forest certification may impact on the ability of landowners to stay up to date with new developments and informed about potential markets for certified forest products. Another aspect of communication, the degree to which landowners feel included in the development of certification standards, was an important factor in influencing landowner acceptance of competing forest certification programmes in Europe.

In order to determine forest owners' attitudes toward certification and address the issues discussed above, a mail survey was sent to private landowners in Alabama in the autumn of 2000. The results of the survey are presented in this chapter in two parts. First, we describe landowners' general attitudes toward forest certification (level of knowledge of and 'openness to' the forest certification concept) and the demographic variables that most influence those attitudes. Second, we describe landowners' views on two specific aspects of the current certification debate: (i) the costs and benefits of certification, including conditions required before landowners in Alabama would seriously consider certification on their own lands; and (ii) cooperation and communication, which addresses landowners' attitudes toward cooperative certification arrangements, participation in certification programme standard development, and the trustworthiness of various groups active in the certification debate in the southeastern USA.

Methods

We used a landowner database created by the Auburn University Private Forest Management Team, which included the names and addresses of all individuals, corporations and organizations owning more than 0.4 ha (1 acre) of forestland in Alabama. Fourteen counties in Alabama were randomly chosen for sampling. In total, questionnaires were sent out to 1960 landowners. The number of landowners sampled in each county was proportional to the total number of landowners in that county.

Ten individuals from academic institutions, certification programmes and landowner associations reviewed draft versions of the survey questionnaire. We conducted pre-tests with seven forest landowners in Alabama and refined the questionnaire based on that feedback. Landowners were sent a postcard in early October describing the project and informing them that a questionnaire would be coming soon. We sent the questionnaire out 2 weeks later. One month after the original postcard, a 'reminder/thank you' postcard was sent to all landowners. Respondents were assured that individual responses would be confidential and stored in an anonymous database. We followed the Dillman tailored design method as closely as possible (Dillman, 2000).

Of the 1960 questionnaires sent out, 56 were returned unopened due to an incorrect address or deceased recipient, 46 were returned by individuals who were not forest landowners and 464 questionnaires were returned by non-industrial forest landowners as usable, giving an adjusted response rate of 25%. We defined those landowners who do not own wood-processing facilities as 'non-industrial.' This chapter pertains only to non-industrial private landowners.

The concept of forest certification was explained in the questionnaire. Relationships between demographic and attitudinal variables were examined using χ^2 tests when data were ordinal scale, and Spearman's correlations when data were interval scale. We tested the following demographic variables: age (in four categories), gender, the percentage of income stemming from forestry (four categories), the frequency of interaction with professional foresters and county extension agents (five categories), past participation in government landowner incentive programmes (yes or no), membership in landowner groups (yes or no), size of forest ownership (number of hectares), and length of forest land ownership (number of years). The null hypothesis was rejected when $P \leq 0.05$.

General Attitudes about the Certification Concept

Previous knowledge of certification

After reading the definition of forest certification provided in the survey booklet, 22% of respondents ($n = 98$) reported that they had

previously heard of forest certification, while 78% ($n = 352$) had not heard of certification or were not sure.

We found many significant relationships between demographic variables and previous knowledge of certification. Men were more likely than women to have heard of certification prior to the survey ($\chi^2 = 9.22, P = 0.002$), as were landowners who had participated in government incentive programmes in the past ($\chi^2 = 37.8, P < 0.001$). A higher knowledge of certification than expected was also observed in landowners who receive a higher proportion of their total income from forestry ($\chi^2 = 24.5, P < 0.001$), landowners who interact more frequently with professional foresters or county extension agents, ($\chi^2 = 91.8, P < 0.000$), and landowners who belong to one or more landowner groups ($\chi^2 = 67.7, P < 0.001$). The size of forestland holdings was weakly but significantly related to prior knowledge of certification (Spearman's $R = -0.13, P = 0.008$). Landowner age and the number of years of forestland ownership were not significantly related to previous knowledge of certification.

Openness to the forest certification and sustainability concepts

Respondents were asked to read statements regarding certification and sustainability and indicate their level of agreement or disagreement on a 5-point Likert scale (a 'no opinion' option was also available). We found that 69% of respondents agreed or strongly agreed with the statement 'I would like to learn more about forest certification' (Fig. 27.1), and 70% agreed or strongly agreed that it is important to stay up to date with new forestry practices and programmes. However, fewer than half (42%) agreed or strongly agreed that certification can significantly improve forest management in Alabama, and fewer than half (44%) agreed or strongly agreed that they had adopted guidelines for forest sustainability on their forest lands. Exactly half of respondents view forest certification as 'just an additional layer of regulation' while 42% agreed or strongly agreed that forest certification 'is a way to get recognition for voluntarily doing good forestry'.

Further tests examined the relationship between the level of agreement or disagreement with the above statements and various demographic variables. None of the demographic variables affected the respondents' desire to learn more about forest certification. A significant relationship existed between frequent interaction with forestry professionals and higher agreement with the statement that certification can significantly improve how forests are managed in Alabama ($\chi^2 = 39.2, P = 0.001$), higher levels of adoption of sustainability guidelines ($\chi^2 = 76.2, P < 0.001$) and more importance placed on staying up to date with new practices and techniques ($\chi^2 = 59.1, P < 0.001$). Similarly, those landowners who had previous participation in government programmes tended to have higher levels of adoption of sustainability guidelines ($\chi^2 = 24.0, P = 0.002$) and more importance placed on staying up to date with new practices and techniques ($\chi^2 = 19.8, P = 0.011$). Age was associated with a negative stance toward participation in certification in Finland (Lindström *et al.*, 1999), but was not significant in our study.

Research on non-industrial private landowners in Europe revealed that 'good knowledge is a prerequisite for participation in certification. Knowledge level affects both general attitudes toward certification and willingness to participate' (Lindström *et al.*, 1999). We found no relationship between knowledge of certification (whether or not landowners had heard of certification before the survey) and any of the attitudinal statements in Fig. 27.1.

Important Certification Issues for Landowners

Costs and benefits of certification

The direct costs of forest certification, such as hiring an auditing crew or preparing a wildlife inventory, are often said to be prohibitory for small landowners. Field experience has shown that there are economies of scale in terms of the cost per unit area of conducting Forest Stewardship Council (FSC) certification evaluations, even when decreased audit team size and reduced field time for small landowners are considered (Scientific Certification Systems, 2000). Other certification programmes tend to have lower costs, often consisting of a nominal yearly fee.

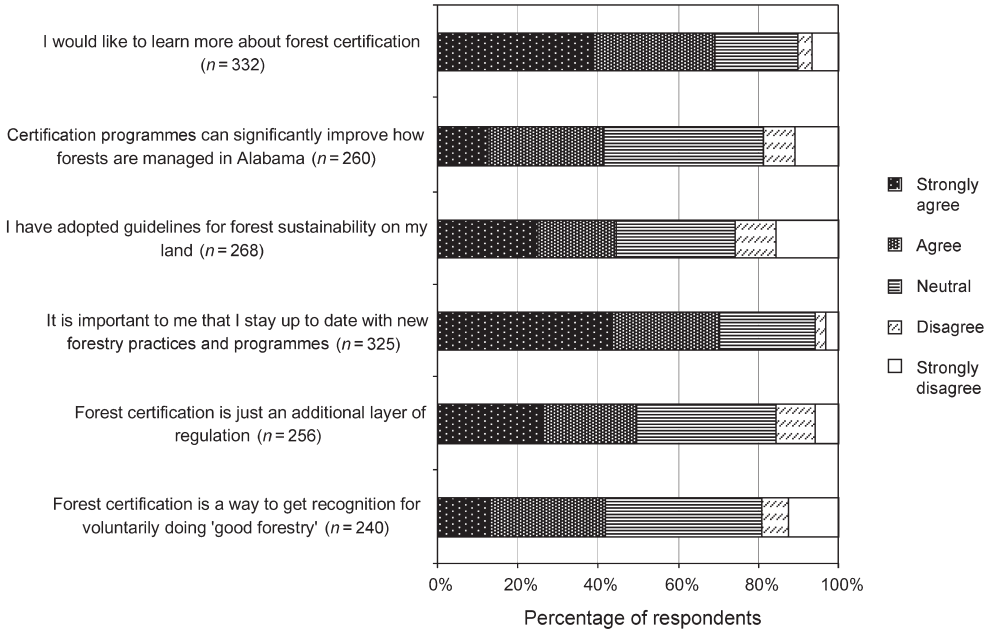

Fig. 27.1. Level of landowner agreement or disagreement with statements about forest certification and sustainability.

When respondents were asked what conditions would have to be fulfilled before they would seriously consider certification for their forest lands, 50% reported that certification must be free (Fig. 27.2). A normative conviction that certification is 'the right thing to do' was the only more frequently cited condition (67% of landowners). The ability to sell certified wood at a higher price than non-certified wood was cited as a condition of certification by 33.6% of respondents.

Further tests revealed that the following types of landowners were more likely to require that certification be free before they would seriously consider it for their forestlands: those who interact less frequently with professional foresters or county extension agents ($\chi^2 = 12.9$, $P = 0.012$), those who have not participated in government incentive programmes in the past ($\chi^2 = 10.0$, $P = 0.007$) and those who are not members of landowner associations ($\chi^2 = 13.3$, $P = 0.012$). Interestingly, the proportion of income from forestry was not significantly related.

Landowners were then asked to indicate how important certain potential direct and indirect costs of certification were when considering certification for their own forestlands (Fig. 27.3).

The Forest Stewardship Council's group certification programme aims at decreasing costs for individual landowners through a stratified auditing system, reduced assessment team size, reduced time in the field, and shared costs of report writing and assessment team travel (Scientific Certification Systems, 2000). The lack of required third-party auditing keeps the costs of other landowner certification programmes in the USA relatively low; nevertheless, these programmes are also taking measures to increase their appeal to private landowners by offering market benefits. For example, the American Tree Farm System's official mutual recognition with the American Forest & Paper Association's Sustainable Forestry Initiative (SFI) was created to provide not only 'new opportunities to work together for continuous improvement on all sizes of ownership', but also 'a practical means for all landowners to demonstrate to both domestic and international markets that [they] are second to none in environmental stewardship' (American Tree Farm System, 2000).

Forest landowners, however, appear to consider the non-monetary benefits of certification to be equal to or slightly more important than monetary ones. When asked to examine a list of the

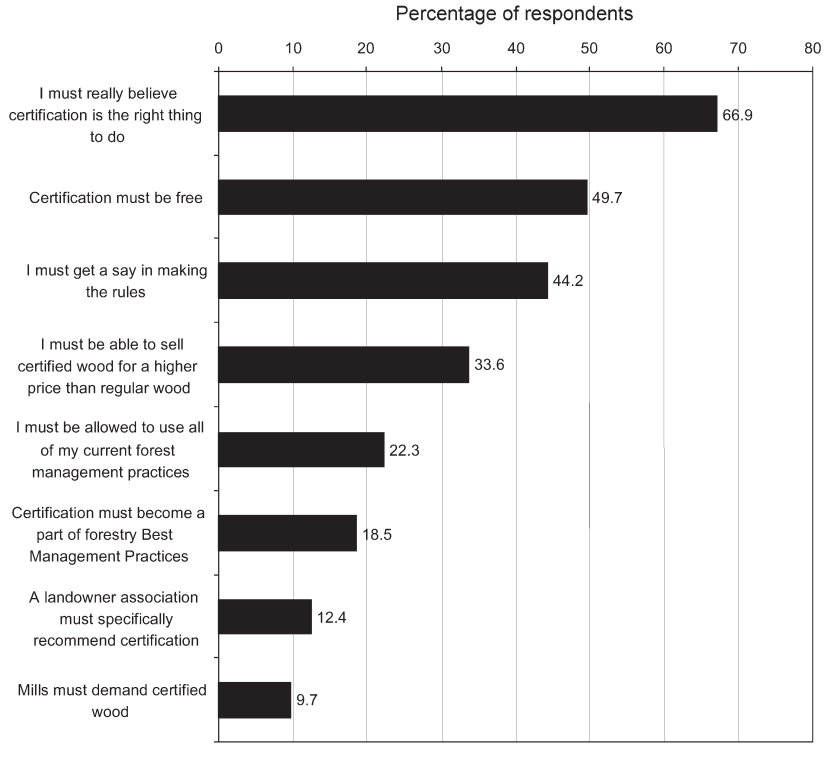

Fig. 27.2. Percentage of respondents who stated that the listed conditions must be met before they would seriously consider certifying their forest lands (n = 453).

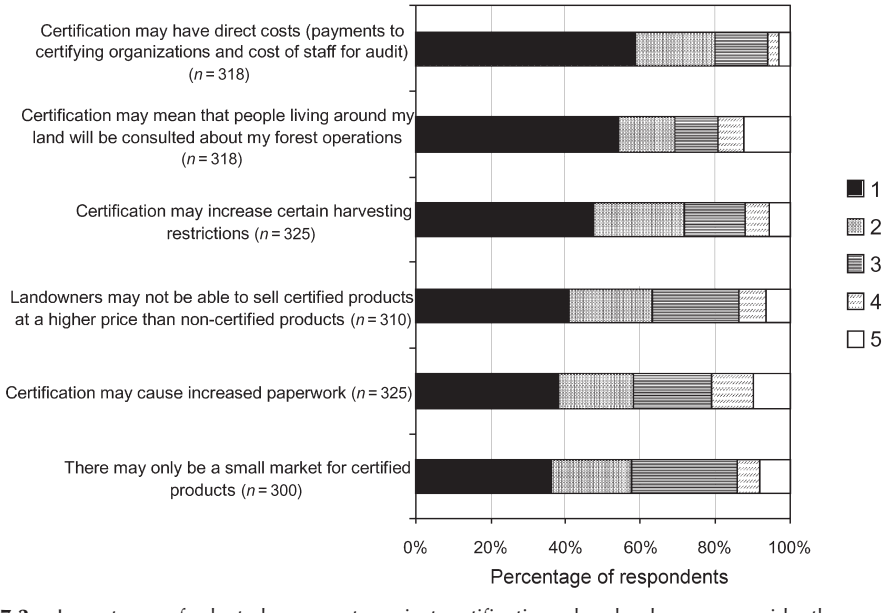

Fig. 27.3. Importance of selected arguments against certification when landowners consider the certification of their own forest lands (1–5 are different levels of importance, with 1 being most important and 5 being least important).

potential benefits of certification and identify which were most important to them, the three most frequently cited benefits included the provision of better wildlife habitat, enhanced timber productivity, and protection of the environment (Fig. 27.4). This result is consistent with survey respondents' assessment of the primary benefit of land ownership: three-quarters of landowners chose non-monetary benefits ('keeping land in the family', 'beauty', 'recreation', and 'hunting'), and one-quarter chose monetary benefits ('income from timber' and 'investment, land speculation'). Interestingly, when the same question was asked to Alabama landowners in 1991, 59% of respondents reported non-monetary benefits as primary (Bliss, 1991).

Notably unimportant was the benefit 'certification may be a way for landowners to show their family and friends that they practice good forestry'. This is somewhat surprising, given the success of the Treasure Forest programme and the Forest Masters programme in Alabama (Glover and Jones, 2001), both of which are strongly associated with a sense of pride in good forest stewardship.

Landowner cooperation and communication around certification

Cooperation and communication among individual landowners, and between landowners and other organizations, are increasingly important aspects of certification. For example, cooperative arrangements among landowners have been proposed by certification programmes as a way to decrease the costs of certification and, in the future, communication between landowners

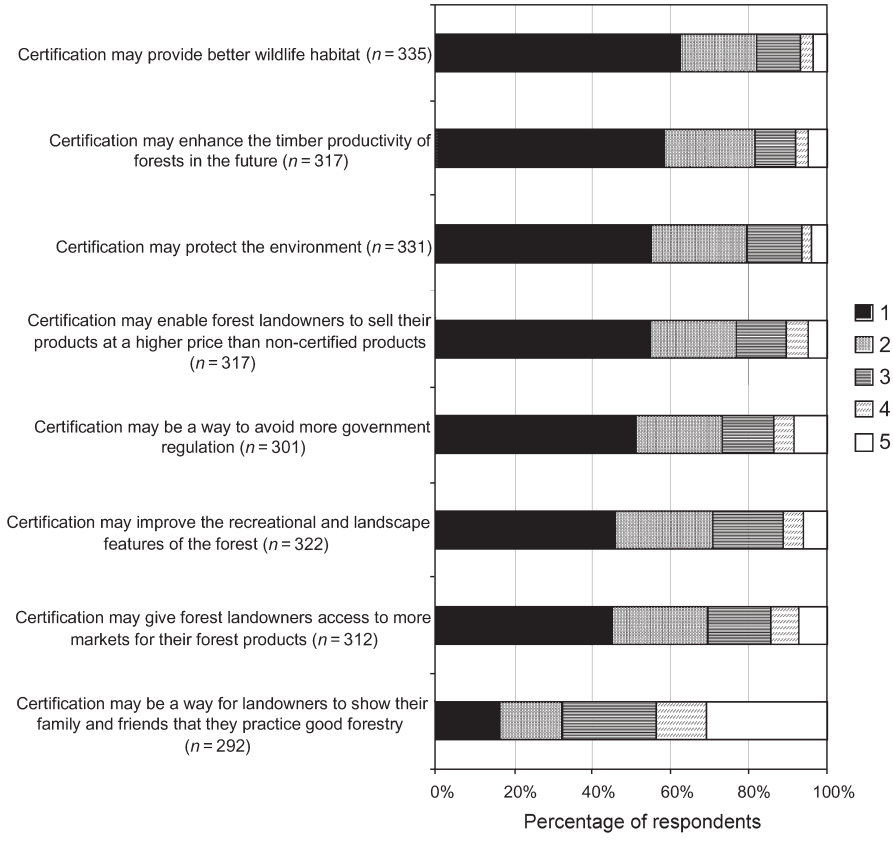

Fig. 27.4. Importance of selected reasons for certification when landowners consider the certification of their own land (1–5 are different levels of importance, with 1 being most important and 5 being least important).

and other groups may become critical for the exchange of information about markets for certified products. Landowners themselves may choose to become involved in the process of setting standards and guidelines within certification programmes, to ensure that their interests are represented. The success of these arrangements depends on the willingness of landowners to be involved, and the degree of trust between landowners and other core groups. We asked landowners questions to determine their attitudes on these topics.

The importance of landowners' willingness to cooperate with each other varies among forest certification programmes. Whereas certification programmes such as the Alabama-based Treasure Forest programme focus on an each landowner's individual goals and practices (Alabama Forestry Commission, 1998), the Forest Stewardship Council's group certification programme requires a degree of cooperation among members of a group.

More than half of the landowners in this survey expressed a willingness to be certified with other landowners if it would decrease costs: 58% of respondents ($n = 154$) agreed or strongly agreed with the statement 'It makes sense for landowners to get certified together if it decreases individual costs'. None of the demographic variables tested affected the answer to this question.

In our survey, 80% of respondents ($n = 265$) agreed or strongly agreed with the statement 'It is important that landowners work together when new forestry issues arise'. Respondent age was significantly related to the level of agreement with this statement: younger landowners were more likely to agree or strongly agree than older landowners ($\chi^2 = 22.3$, $P = 0.03$). The size of forestland holdings was weakly but significantly correlated with the level of agreement with this statement (Spearman $R = -0.14$, $P = 0.03$). The negative relationship between age and willingness to cooperate suggests that cooperative arrangements such as group certification may meet with increasing success as the next generation of landowners takes over management responsibilities.

A survey of landowners' attitudes toward the concept of ecosystem management by Brunson *et al.* (1996) indicated that the majority of landowners in the Southeast (59%) were 'interested in observing a [collaborative] partnership at work, but would need to know more before deciding to join'. While 23% were definitely interested in joining, 15% would be unlikely to join such a partnership. Many landowners in that study reported being more likely to join such partnerships if certain conditions were met: if most neighbouring landowners participated (14–18%); if federal agencies were not involved (14–19%); and if protecting commodity uses was a primary partnership objective (15–23%).

Alabama landowners were asked to indicate how much they trusted various organizations to be involved in the design and implementation of forest certification programmes. Landowner associations, professional foresters and the state government were the three organizations rated most trustworthy by landowners in Alabama (Fig. 27.5). Least trustworthy organizations were non-governmental organizations and groups or companies that perform certification audits. Similarly, landowners in Louisiana place the most trust in certified foresters, forest-related associations ('second-party' certifiers), and state governments (Vlosky, 2000). Federal government and non-governmental organizations also ranked least trustworthy by Louisiana landowners.

The importance of landowner 'networks' is reflected in the fact that more than a quarter of respondents having heard of certification before the survey had heard of it from other landowners or a landowner association (Fig. 27.6). However, only 12.4% of landowners said that a landowner association must specifically recommend certification before they would seriously consider it for their own lands (see Fig. 27.2). Other important sources of information on certification include professional foresters (25%) and forest companies (15%). Environmental groups ranked lowest as a source of certification information, with only 3% of landowners having heard of certification from such groups.

The final component of cooperation and communication that we examined was the participation of landowners in the creation and development of certification programmes. We asked landowners how important their participation is: 44% of respondents said that they would not seriously consider certification for their own forest lands unless they 'had a say' in making the rules (Fig. 27.2). Younger landowners were significantly more likely than older ones to cite participation in rule making as a prerequisite for considering certification on their lands ($\chi^2 = 8.1$, $P = 0.044$). The relationship between

age and desire to participate in the setting of certification standards bodes well for the involvement of landowners in the certification debate in the future.

Conclusion

If the demand for certified forest products by retailers (and potentially consumers) in the

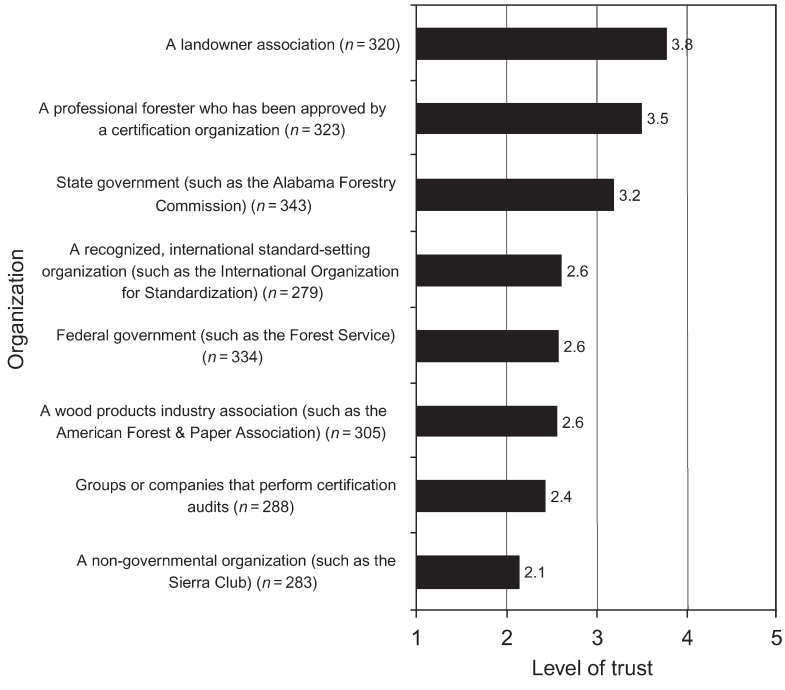

Fig. 27.5. Average level of 'trustworthiness' of different organizations in terms of creating and implementing forest certification programmes (1 = least trust, 5 = most trust).

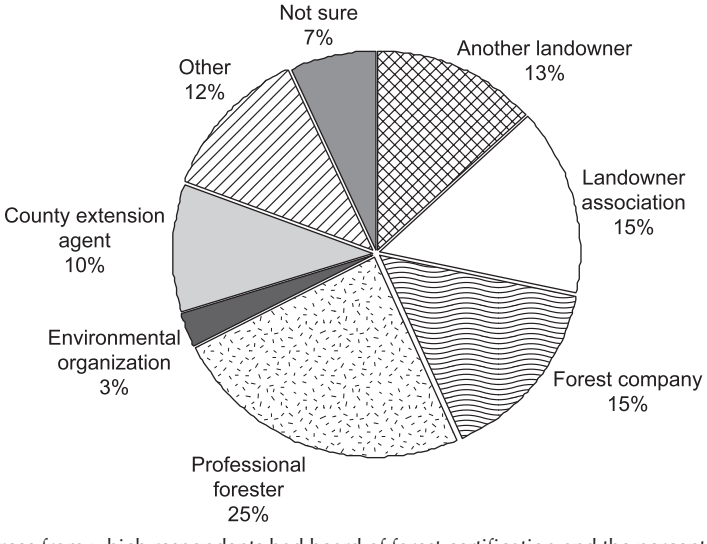

Fig. 27.6. Sources from which respondents had heard of forest certification and the percentage of respondents who cited that source (sum of percentages does not equal 100 because respondents could choose multiple sources, *n* = 95).

marketplace continues to increase, the pressure to participate in certification will most certainly reach private forest landowners. In Alabama, private forest landowners currently know relatively little about forest certification, but the majority would like to learn more. There exists a strong scepticism by the majority of landowners, however, about whether certification can improve forest management in Alabama.

Certification programmes attempting to reach landowners in Alabama should work with landowner groups and professional foresters, as these groups are seen as most trustworthy by landowners and have already established channels of communication with landowners about certification. Certification programmes would do well to educate landowners about the voluntary and market-based nature of certification, since it is currently perceived by half of Alabama landowners as 'just another layer of regulation'. Landowner interaction with forestry professionals and participation in government incentive programmes are positively related to landowner adoption of sustainability guidelines, and these activities should be maintained and encouraged as an important compliment to certification.

Certain demographic groups in Alabama are more open to sustainability initiatives and the certification concept than others, and they may be a good starting point for outreach efforts by certification programmes. These groups include landowners who have higher levels of interaction with forestry professionals and who have previously participated in government incentive programmes. Certification programmes should consider designing special information programmes to target female landowners, since existing communication channels leave this demographic group less informed about certification than male landowners. Younger landowners may be willing to play a leadership role in forest certification in the future, as they tend to place more importance on cooperation among landowners than older landowners, and are more interested in participating in the development of certification standards.

Landowners must be sure that certification is the 'right thing to do' before they will participate in a programme. Their values must be assessed by certification programmes and addressed in a meaningful way; research in other sectors has shown that this step is crucial for the long-term legitimacy of new institutional arrangements (Jentoft, 1989), such as a certification programme. Once that step occurs, attempts to minimize or even eliminate certification costs for landowners should be undertaken.

The majority of Alabama landowners appear to be open to group certification or other cooperative initiatives. When landowners in Alabama are informed about the potential benefits of certification, non-monetary benefits such as improved wildlife habitat and environmental protection should be given equal or more emphasis than potential monetary benefits, such as price premiums.

Acknowledgements

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