

Florida Forestry Association: Outreach and Research Survey Results



**FLORIDA
FORESTRY
ASSOCIATION**



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Introduction

Members of the Florida Forestry Association own and manage millions of acres of Florida’s forests. Proper forest management requires a great deal of time, commitment, skill, and knowledge to ensure forests deliver benefits that meet landowner needs. Faculty and staff in the University of Florida’s School of Forest Resources and Conservation can assist Association members with their forest management by conducting research that will help managers meet their goals. To prioritize and communicate their research programs effectively, SFRC researchers need to know what research would benefit Association members.

This report details initial findings from a survey of Florida Forestry Association (FFA) members regarding topics they rank as important sources of information, as well as topics they would like SFRC researchers to address that would help inform their land management goals and strategies. A total of 136 Association members participated in the questionnaire and represented a diversity of FFA members. A follow-up questionnaire was sent out to 136 respondents to measure their value for outreach topics.

Description of Respondents

Over half the 136 survey participants were male and either own their land personally or in the family (Table 1). Relatively few respondents stated affiliation with a Timber Investment Management Organization (TIMO) or Real Estate Investment Trust (REIT).

Table 1. Demographics of survey participants by land ownership

Ownership	Male	Female	NA	Percent
Family Owned	31	6	9	34%
Personally Owned	25	2	10	27%
TIMO/REIT	7	0	8	11%
Other	9	0	14	17%
NA			15	11%
Total	72	8	56	100%

Nearly half of the survey participants (45%) had owned their land for fewer than 20 years, and about a quarter (23%) had owned land for between 20 and 50 years (Table 2). Only 8 of the respondents specified they owned land as a TIMO or REIT.

Table 2. Number of years participants had personally owned their properties

Years Owned	Number	Percent
0-10	32	24%
11-20	28	21%
21-40	26	19%
41-50	6	4%
51+	2	1%
NA	42	31%

One hundred participants specified the acreage of their property (**Fig. 1**). Of these, 52% owned or managed 500 or fewer acres of land with 27% managing more than 25,000 acres of land. Most of the largest properties were owned by a TIMO or REIT.

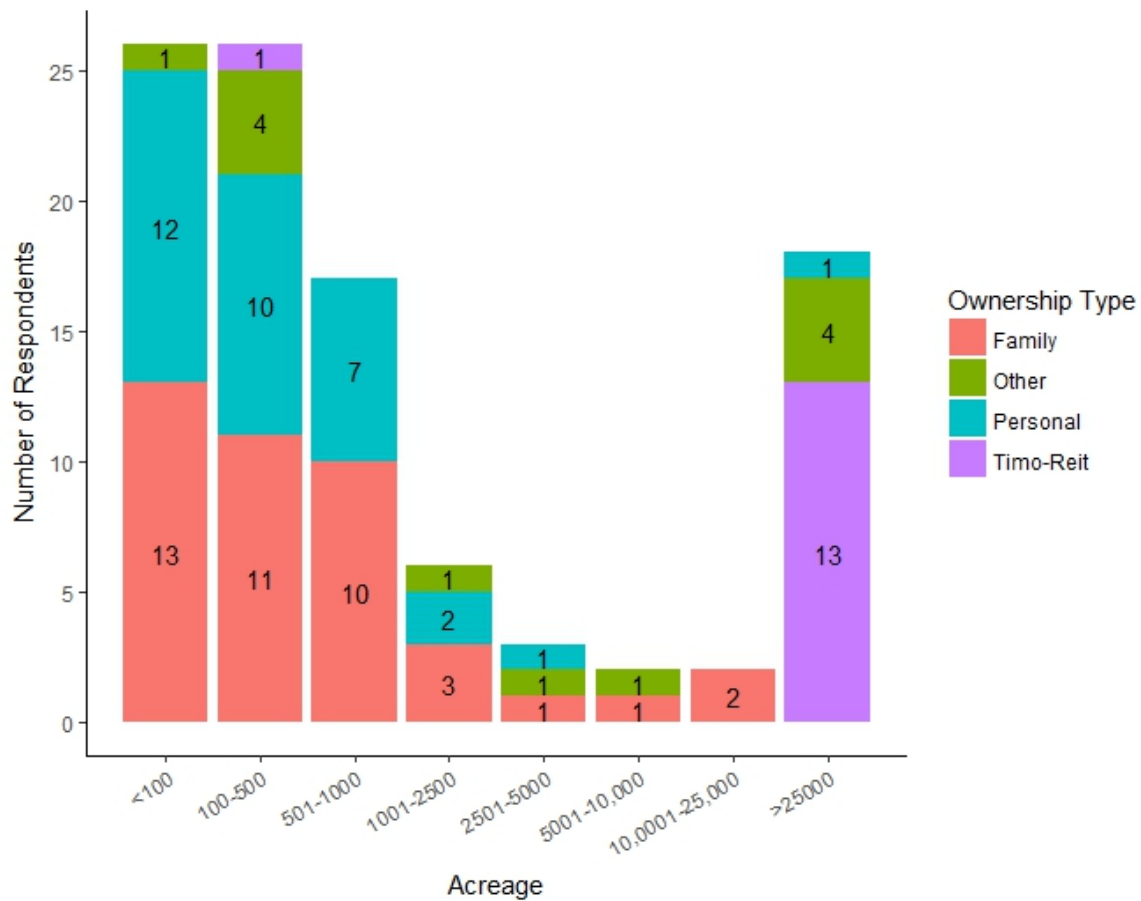


Figure 1. The number of acres owned or managed by survey participants in different ownership categories. Labels in stacked bars indicate number of respondents.

We examined the reasons for owning land among small (<1000 acres) and large (>1000 acres) property owners (1 = Very Important, 2 = Moderately Important, 3 = Slightly Important, and 4 = Not At All Important). Income generation and timber production were the most important reasons for owning land overall, although they were ranked more importantly among large landholders (**Table 3**). Hunting was also ranked much higher by larger landholders (**Table 3**). Aesthetics and protecting nature were only moderately important.

Table 3. Comparison of mean rank of reasons for owning land by property size (1 = Very Important, 2 = Moderately Important, 3 = Slightly Important, and 4 = Not At All Important).

Reason	P value	Mean Rank		Sample Size	
		<1000 acres	>1000 acres	<1000 acres	>1000 acres
Generate income	0.00	1.7	1.2	66	28
Timber production	0.00	1.6	1.2	66	30
Hunting lease	0.00	3.0	2.1	66	30
Aesthetics	0.31	1.9	2.1	66	28
Protect nature	0.93	1.8	1.8	66	28
Vacation home	0.84	3.5	3.6	66	27
Recreation	0.75	2.0	2.1	66	27
Other	0.39	2.1	1.5	8	4

Research Topics

Respondents were asked what topics they believed scientists should pursue in order to help improve the management of their land. Respondents were giving a list of 29 topics to rate on a scale of 1 to 5 (1 = Not At All Helpful, 2=Somewhat Helpful, 3=Helpful, 4=Very Helpful, 5 = Extremely Helpful).

Forest productivity, Timber products, Invasive species, Forest economics and policy, Growth and yield, and Silviculture were all rated as very or extremely helpful topics for research (**Table 4**).

Table 4. Mean ranking of research topics among survey respondents (1 = Not At All Helpful, 2=Somewhat Helpful, 3=Helpful, 4=Very Helpful, 5 = Extremely Helpful).

Research Topic	Mean Rank	Number of responses
Forest Productivity	4.2	80
Timber Products	4.1	78
Invasive Species	4	80
Forest Economics and Policy	4	81
Growth and Yield Models	4	80
Silviculture	4	78
Forest Taxation	3.9	81
Forest Genetics	3.8	79
Forest Entomology	3.7	79
Habitat Management	3.6	79
Forest Water Resources and Hydrology	3.5	79
Fire Ecology and Management	3.5	81
Remote Sensing and GIS	3.5	80
Forest Ecology	3.5	79
Valuation of Ecosystem Services	3.3	79
Other	3.3	7
Tree Biology	3.3	77
Natural Resource Communication and Education	3.3	81
Bioenergy	3.2	78
Natural Resource Conflict Management	3.2	79
Non-Timber Products	3.1	76
Ecosystem Restoration	3.1	80
Agroforestry	2.9	77
Urban Impacts on Forests	2.9	76
Recreation and Ecotourism	2.8	78
Fish Ecology and Management	2.2	78

Within each helpfulness category there were certain research topics that participants frequently ranked in that category (**Fig. 2**). Forest productivity, invasive species, and timber products were most frequently ranked as extremely helpful. Forest economics and policy, growth and yield, and remote sensing and GIS were most frequently considered to be very helpful (**Fig. 2**).

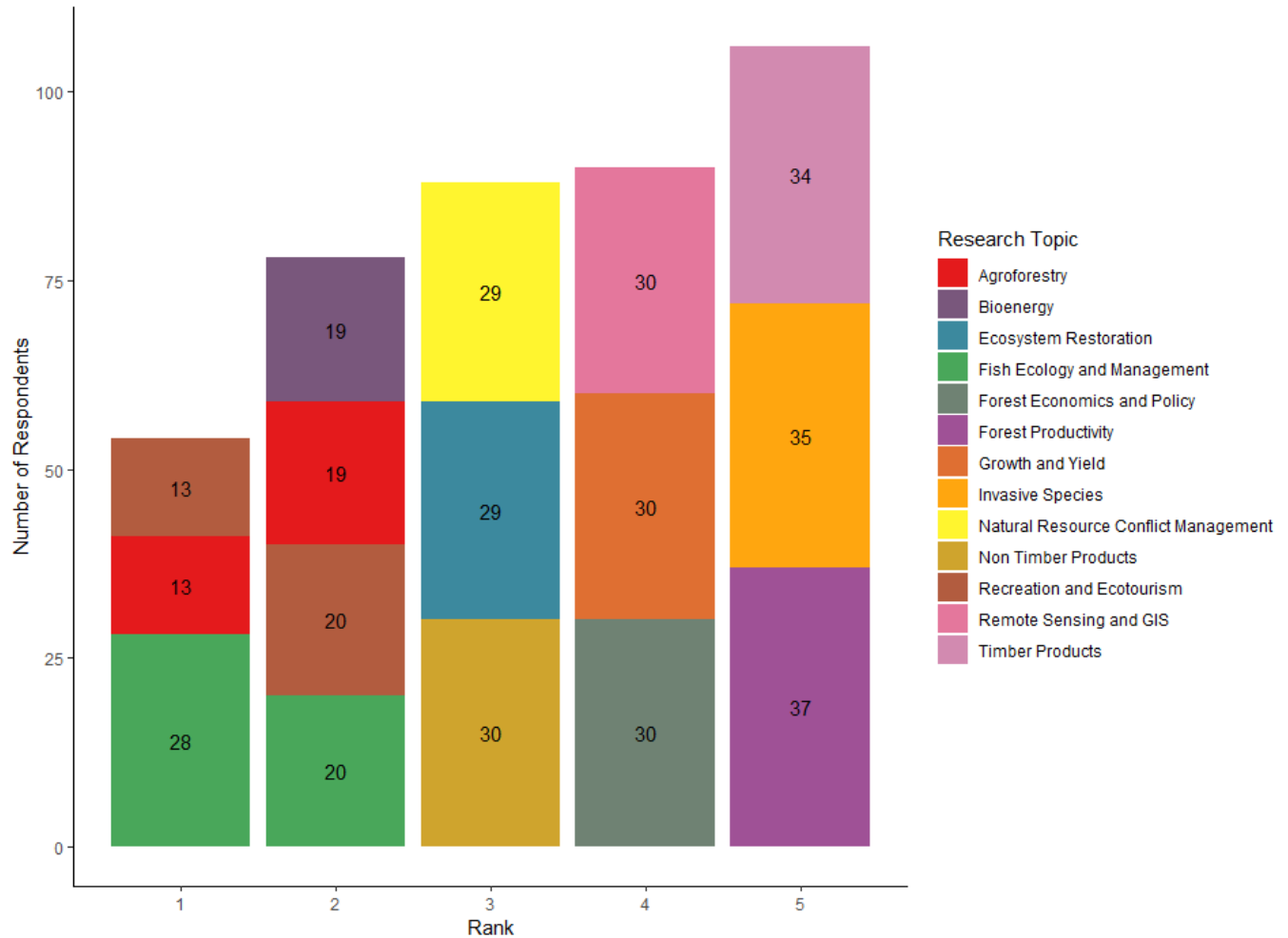


Figure 2. Most commonly scored research topics that forest landowners felt would help them improve their land management. Labels inside stacked bars indicate number of respondents. (1 = Not At All Helpful, 2=Somewhat Helpful, 3=Helpful, 4=Very Helpful, 5 = Extremely Helpful)

We statistically compared mean ranks of research topic helpfulness between Family and Commercial property owners. The “Family” category included those with family- and personally- owned land. Because most respondents in the “Other” category were consultants, managers of state or company-owned land, or lessees, we combined them with TIMO and REIT respondents as “Commercial”. Only three research topics received significantly different mean rankings between commercial and family property owners (**Table 5**). Forest ecology, habitat management, and fire ecology and management were ranked significantly higher by family property owners. Mean rankings for the remaining research topics were not significantly different (at the $p < 0.1$ level) between the two groups. Comparing mean ranks of research topic helpfulness between small (<500 acres) and large (>500 acres) property owners did not produce meaningful results.

Table 5. Comparison of mean rank of research topic helpfulness by land ownership type (1 = Not At All Helpful, 2=Somewhat Helpful, 3=Helpful, 4=Very Helpful, 5 = Extremely Helpful). Bold p-values indicate significantly different rankings between land ownership types.

Research Topic	P value	Mean Rank		Sample Size	
		Commercial	Personal	Commercial	Personal
Forest Ecology	0.01	2.9	3.6	17	62
Habitat Management	0.02	3.1	3.7	17	62
Fire Ecology and Management	0.05	3.1	3.7	18	63
Forest Water Resources and Hydrology	0.10	3.1	3.7	16	63
Ecosystem Restoration	0.12	2.8	3.2	18	62
Agroforestry	0.14	2.5	3.0	17	60
Urban Impacts on Forests	0.16	2.5	3.0	17	59
Tree Biology	0.18	2.9	3.4	17	60
Recreation and Ecotourism	0.24	2.5	2.9	17	61
Silviculture	0.25	4.2	3.9	17	61
Natural Resource Conflict Management	0.26	2.9	3.3	17	62
Remote Sensing and GIS	0.33	3.7	3.4	17	63
Timber Products	0.37	4.3	4.0	17	61
Forest Productivity	0.38	4.4	4.1	17	63
Forest Economics and Policy	0.45	3.8	4.0	18	63
Invasive Species	0.46	3.8	4.0	17	63
Non-Timber Products	0.51	3.3	3.1	17	59
Bioenergy	0.64	3.1	3.2	17	61
Natural Resource Communication/Education	0.75	3.3	3.2	18	63
Fish Ecology and Management	0.81	2.1	2.2	17	61
Forest Taxation	0.81	3.9	4.0	18	63
Valuation of Ecosystem Services	0.82	3.2	3.3	18	61
Forest Genetics	0.83	3.9	3.8	17	62
Forest Entomology	0.89	3.7	3.7	17	62
Growth and Yield Models	0.93	3.9	4.0	17	63

Additional Research Topics

Respondents were also asked to list other research topics that could be studied at a local, national, or international scale, which Association members thought might be valuable, even if research in that area might not directly assist in their land management (**Table 6**). One specific topic did not dominate the list of items mentioned, and most items only received one comment. However, “best ways to improve income/growth” and “climate change impacts” received the most comments, with each topic being mentioned three times.

Table 6. Additional Research Suggestions. Respondents listed any additional forest research topics they felt would improve the management of forests locally, regionally or internationally.

-
1. Best ways to produce income/growth -3
 2. Climate change impacts - 3
 3. Drones/Remote sensing -2
 4. Promote new wood products and facilities -2
 5. Promotion of more burning (public education and politically) =2
 6. Biofuel Development
 7. Stewardship accreditation
 8. Promotion of private property rights
 9. Increased public education on history of Florida’s forests
 10. Costs of managing national forest
 11. Income generated per acre from national forest
 12. Species to plant for specific sites besides pine
 13. Product marketing
 14. Improve markets for different timber grades
 15. Impact from government land use
-

Potential Educational Topics

The questionnaire requested respondents to list the top five educational topics they would find helpful for managing their forests. Respondents were free to list any topic they chose in an open-ended format. Two SFRC researchers independently categorized all respondents’ answers and created categories of the topics. Several sub-topics were included in some of the larger categories that received many comments to better describe categories of interest to respondents (**Table 7**). The two researchers generally came up with similar categories and negotiated in resolving any differences. These topics were then consolidated into the most frequently requested topics.

Table 7. Major Topics Respondents Want to Learn (Major topic/Sub-topics) in order of comments received (most to least)

Major Educational Topic with Sub-Topics
Silviculture techniques
Spacing
Tree improvement
Fertilizer
Release treatments/thinning
Site prep
Costs
Advantages and disadvantages of different types of pine
Rotation length
Suggestions based off of soil type
Genetics
Fire Management
Prescribed burns
Education
Liability
Preventative measures
Wildlife Management
Native forage
Increasing wildlife
Native forage for game
Listed endangered species/locations
Pest and Invasive Control
Herbicides
How to manage beetle and fusiform issues
Pest identification and control
Timber Sales
Market
Inventory techniques
Sales process
Stumpage prices and projections for future prices
Marketing
Best Management Practices
Combating diseases
Hurricane and wind damage
Watershed protection
Agroforestry
Non-timber forest products
Monetizing ecosystem services
Technology
GIS

Major Educational Topic with Sub-Topics

- Software improvements
 - Remote Sensing
 - Government regulation and incentives
 - Insurance management
 - Cost share assistance programs
 - Conservation easements
 - Immanent Domain Protection
 - Tax Benefits
 - Using government incentive programs better
 - Role of private forests within ecosystems
 - Longleaf restoration
 - Sustaining family owned forests
 - Keeping kids interested
 - Ownership to avoid heir issues
 - Keeping family farms alive
 - Hunting lease management
 - Forest road maintenance/construction
 - Silvopasture
 - Native grasses/grazing
 - Wildlife
 - Erosion control
 - Pond management
-

Another survey was sent out, allowing respondents to rank their interest in these topics (1 = Not At All Interested, 2=Somewhat Interested, 3=Interested, 4=Very Interested, 5 = Extremely Interested). The highest ranked topic was Pest and invasive control, followed by topics related to timber and wildlife management (**Table 8**).

Table 8. Mean ranks of major educational topics in which survey participants are interested (1 = Not At All Interested, 2=Somewhat Interested, 3=Interested, 4=Very Interested, 5 = Extremely Interested)

Topic	Mean Rank
Pest and Invasive Control	3.93
Timber Sales	3.70
Silviculture Techniques	3.62
Alternative Incomes to Timber	3.50
Wildlife Management	3.48
Sustaining Family Owned Forests	3.46
Best Management Practices	3.44
Fire Management	3.39
Government Regulations and Incentives	3.39
Combating Forest Diseases	3.30
Hurricane and Wind Damage	3.25
Watershed Protection	3.11
Longleaf Pine Ecosystem Restoration	3.07
Role of Private Forests Within Ecosystems	3.00
Forest Road Maintenance/Construction	2.93
Spatial Technology (e.g., GIS)	2.89
Erosion Control	2.82
Hunting Lease Management	2.54
Pond Management	2.41
Silvopasture	2.25

Respondents also selected which method of delivery would be preferred for information on these topics (**Table 9**). Twenty-six of the survey respondents ranked at least one of these delivery methods. The most preferred method of delivery was to receive information via newsletter, which was the most requested method for 14 of the 20 total topics (**Table 9**). On average of 18.6% of respondents listed this as their preferred method. Online videos were also well received, with this method being the most requested for 5 of the 20 topics, and an average of 16.7% of respondents selecting it. The respondents did not appear to care as much for information to be delivered via online course, which was the least preferred method for 18 of the 20 total topics. Only 3.0% of people on average listed taking an online course as their preferred method of delivery.

Table 9. Educational topics in which Florida Forestry Association members are interested, and methods by which they would prefer to learn about the topics. Values are in percents.

Topic	Newsletter	Online Video	The Association Website	One Day Workshop	Extension Publication (EDIS)	Webinar (online lecture)	Field Trip	Take an Online Course	Not Interested/ Would Use No Source
Pest and Invasive Control	17.8	19.2	9.6	16.4	15.1	11.0	8.2	2.7	0.0
Timber Sales	20.0	15.7	14.3	12.9	14.3	10.0	7.1	5.7	0.0
Silviculture Techniques	13.6	14.8	14.9	17.6	10.8	8.1	13.5	6.8	0.0
Alternative Incomes to Timber	20.3	15.9	17.4	11.6	13.0	10.1	7.3	2.9	1.5
Wildlife Management	15.7	18.6	10.0	17.1	11.4	10.0	11.4	4.3	1.4
Sustaining Family Owned Forests	19.4	19.4	16.7	12.5	15.3	8.3	4.2	2.8	1.4
Best Management Practices	18.8	15.9	11.6	18.8	13.0	10.1	7.3	4.4	0.0
Fire Management	11.9	19.4	13.4	17.9	9.0	11.9	10.5	4.5	1.5
Government Regulations and Incentives	23.4	12.8	27.7	10.6	17.0	6.4	2.1	0.0	0.0
Combating Forest Diseases	15.9	22.2	14.3	14.3	15.9	9.5	4.8	3.2	0.0
Hurricane and Wind Damage	20.7	17.2	17.2	13.8	13.8	8.6	6.9	1.7	0.0
Watershed Protection	20.0	14.6	18.2	12.7	10.9	12.7	5.5	3.6	1.8
Longleaf Pine Ecosystem Restoration	18.3	15.0	13.3	13.3	15.0	11.7	8.3	3.3	1.7
Role of Private Forests Within Ecosystems	20.0	18.9	20.0	10.9	10.9	7.3	3.6	5.5	3.6
Forest Road Maintenance/Construction	20.0	20.0	11.7	15.0	13.3	6.7	6.7	3.3	3.3
Spatial Technology (e.g., GIS)	17.0	17.0	13.6	15.3	15.2	10.2	6.8	3.4	1.7
Erosion Control	20.4	18.4	16.3	14.3	14.3	6.1	8.2	0.0	2.0
Hunting Lease Management	20.8	14.6	16.7	10.4	14.6	10.4	0.0	2.1	10.4
Pond Management	20.1	14.6	16.7	8.3	14.6	8.3	6.3	0.0	10.4
Silvopasture	17.5	10.0	17.5	15.0	15.0	5.0	12.5	0.0	7.5
Mean Percentage	18.6	16.7	15.6	13.9	13.6	9.1	7.1	3.1	2.4

Conclusion

Most land owned among survey participants is private and used to generate income and produce timber. Because these were major reasons why most participants owned land (regardless of property size), they likely motivated interest in research related to forest productivity, economics, and timber products and in education related to pests and invasive species, timber sales, and silvicultural techniques. Although fire management, forest ecology, and habitat management appeared to be relatively less helpful research topics overall (**Table 4**), they were clearly considered the next most helpful research topics by private landowners (**Table 5**).

Association members value research on innovative and technical topics but in terms of education, they are more interested in learning about the practical applications of the research. For example, although forest genetics and remote sensing and GIS were ranked as more than helpful research topics by all survey participants (**Table 4**), participants were primarily interested in learning about pest control, silvicultural techniques, and alternative incomes to timber (**Tables 7, 8**). Wildlife management, along with sustaining family-owned forests, also received great educational interest from all survey participants (**Table 8**).

Outreach and education efforts should focus on providing information about pest and invasive species management (identification, control methods, herbicide options); silvicultural techniques (site preparation methods, tree spacing and fertilization, thinning); and how to generate income from timber and other sources (markets and prices, inventory techniques, the sales process). In addition, information on wildlife and fire management and on how to sustain family-owned forests is considered helpful to Association members. Because landowners indicated a strong preference for information delivery via newsletter or online website, recommendations for management should be conveyed as clearly as possible in written text or online webpages and videos. Some information, such as timber or wildlife management techniques or best management practices, should be communicated in one-day hands-on workshops.

Future research and outreach should consider the priorities and interests of Association members. Research should focus on aspects of forest ecology and economics that will inform management techniques for increasing forest resilience to climate change and pests. Landowners value education on ways to sustain the income generated from current forest products and from novel alternative sources of income on their lands. Research information should be used to educate landowners on concepts, techniques, and practices for managing their forests and marketing their products.

Appendix 1

Florida Forestry Survey: Outreach and Extension Needs

Q31 Hello Forest Landowner,

The Florida Forestry Association is committed to helping its members receive the most scientifically accurate and current information related to forest management. To achieve this goal, the Florida Forestry Association is working with the School of Forest Resources and Conservation at the University of Florida to conduct a needs assessment of its members to identify what you believe are the most important educational and research topics related to forest management.

Your participation in this survey is completely voluntary. There is no risk, compensation, or other direct benefit to you for participating in the survey, other than the opportunity to let us know your opinions about forest outreach and research needs. All responses will be anonymous and will not be connected with your name or other identifying information. Only the researchers will have access to the information we collect online. There is a minimal risk that security of any online data may be breached. The online host (Qualtrics) uses several forms of encryption and other protections. We will not release any identifying sources of information to an outside source. Therefore, the online data you provide in this survey will not result in any adverse consequence for you.

This survey will take approximately 5-10 minutes to complete. This is the first of a three part process designed to identify Florida Forestry Association members' needs for outreach and research. If you decide to continue in all phases, we will ask you to submit your email at the end of this questionnaire, which we will use to send two smaller questionnaires that will ask you to prioritize the list of outreach and research priorities.

Note that you must be 18 years or older to participate in this study. If you agree to participate in this survey, please click the box to agree to participate at the bottom of the page. If you have questions about this study, please contact the principal investigator, Dr. Taylor Stein:

Taylor Stein (Professor)
University of Florida - School of Forest Resources and Conservation
PO Box 110410
345 Newins-Ziegler Hall
Gainesville, FL 32611-0410
Phone: 352-846-0860

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If you have questions about your rights as a research participant, please contact the University of Florida IRB Institutional Review Board office at:

98A Psychology Building
University of Florida
P. O. Box 112250
Gainesville, FL 32611-2250
Telephone: (352) 392-0433
Fax number: (352) 392-9234
Email: irb2@ufl.edu
Please refer to the IRB Study Number: IRB201800872.

Q32 Do you agree to take this survey?

- Yes (1)
- No (2)

Skip To: End of Survey If Do you agree to take this survey? = No

Q25 The purpose of this first section of questions is to help us better understand the general forest types and management activities of the Association members.

Q21 Is your land...

- Family owned (1)
- Personally owned (2)
- TIMO / REIT (3)
- Other (4) _____

Q3

How many years has your family owned or managed the land?

Q1 How many years have you personally owned or managed the land?

Q5 How many forested acres do you currently own / manage?

Less than 100 acres (1)

100 to 500 (2)

501 to 1,000 (3)

1,001 to 2,500 (4)

2,501 to 5,000 (5)

5,001 to 10,000 (6)

10,001 to 25,000 (7)

More than 25,000 (8)

Q6 What is the primary use of your land?

Agriculture (1)

Timber (2)

Recreation (3)

Other (Please specify) (4) _____

Q11 How important are the following reasons for why you own forested land?

	Very important (1)	Moderately important (2)	Slightly important (3)	Not at all important (4)
Aesthetics (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Protect nature (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Vacation home (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Generate income (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Timber production (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hunting lease (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Recreation (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q23 Do you live on your forested land? If no, please indicate how often you visit.

- Yes (1)
- No (2) _____

Q27 These next five questions are the main focus of the survey. They will allow the Association and UF to focus their research topics and outreach programs in a way that will be more beneficial for landowners throughout Florida and abroad.

Q13

The University of Florida's Cooperative Extension Office has worked with private landowners for over a century to help teach planning and management strategies to ensure they can achieve the goals they have for their land.

Please list the top five topics or subjects you would most like to learn that would help you better manage your forest.

Q20 Please list any additional topics or subjects you think UF forestry extension programs should address which might not be directly related to your forests.

Q33 Forest management requires good science to ensure land managers can achieve the multiple ecological, biological, social, and economic goals that our diverse society demands from forests. The University of Florida has the capability to conduct any type of research that might benefit you and your forest.

What topics do you believe the scientists at the University of Florida should pursue in order to help improve the management of your land?

	Not At All Helpful (1)	Somewhat Helpful (2)	Helpful (3)	Very Helpful (4)	Extremely Helpful (5)
Agroforestry (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Bioenergy (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ecosystem Restoration (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Fire Ecology and Management (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Fish Ecology and Management (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Forest Ecology (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Forest Economics and Policy (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Forest Entomology (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Forest Genetics (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Forest Productivity (10)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Forest Taxation (11)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Forest Water Resources and Hydrology (12)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Growth and Yield Models (13)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Habitat Management (14)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Invasive Species (15)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Natural Resource Conflict Management (16)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Natural Resources Communication / Education (17)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Recreation and Ecotourism (18)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Remote Sensing and GIS (19)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Silviculture (20)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Timber Products (21)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Non-Timber Products (22)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Tree Biology (23)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Urban Impacts on Forests (24)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Valuation of Ecosystem Services (25)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other (26)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q34 List any other forest research topics that you believe SFRC researchers should undertake to improve the management of forests (locally, regionally or internationally).

Q24 How would you like to be informed of new forest management information? Please mark all that apply.

- The Association website (1)
- Workshop (2)
- Field trip (3)
- Email (4)
- Video (5)
- Newsletter (6)
- Postal mail (7)
- Social media (8)
- Other (9) _____

Q28 These last few questions will help us understand the demographics of respondents to this questionnaire, so if you are completing the questionnaire for an organization you are working

for, answer the questions in terms of yourself, not the owner or manager of the organization. Please feel free to skip any question you do not feel comfortable answering.

Q39 What age group do you belong to?

- 18-29 (1)
- 30-39 (2)
- 40-49 (3)
- 50-59 (4)
- 60-69 (5)
- 70-79 (6)
- 80-89 (7)
- 90+ (8)

Q18 What is your gender?

- Male (1)
- Female (2)

Q16 What is your profession or occupation?

Q17 What county is your land primarily located in?

Q38 The next phase of this research will prioritize SFRC outreach topics based on your needs. If you would be willing to rank our topics, please enter your email below. Your email will only be used for this follow up survey and will not be distributed to any outside source.

Q29 We appreciate you taking the time to complete this survey. Please use this space to give us any comments you were not able to provide above. Thank you!

Appendix 2

Florida Forests Outreach Follow-up

Several months ago you assisted the University of Florida and Florida Forestry Association in a survey to better understand how UF can better serve your educational needs as they relate to the management of forests. Based on your responses, we identified a variety of educational topics that might or might not be beneficial to you. This short survey is a follow up to the first questionnaire where we hope to understand the extent you want to learn about the topics identified in that first survey. This survey only contains a few questions, with the main question asking you to tell us your level of interest for 20 topics, and how you might want to learn about each topic. We appreciate you providing us with your input.

Please enter your email address. (Your email address will only be used for this study, and it will not be provided to any second party.)

We would like to understand how interested you are in learning about various forest management topics and how you would most like to learn about each topic. Please answer both questions for each topic.

1. How interested are you in learning more about this topic?

2. What information source would you use? (click all that apply)

Not at all interested	Some what interested	Interes ted	Very interes ted	Extre mely interes ted	The Associa tion Website	One Day Works hop	Fie ld Trip	Extensi on Publica tion (EDIS)	On-line Video	Newslet ter	Webi nar (on-line lecture)	Tak e an on-line course	Not interes ted in topic and would use no source
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Silviculture
Techniques

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Fire
Management

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Wildlife
Mangaement

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Pest and
Invasive Control

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Timber Sales

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Best
Management
Practices

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Combating
Forest Diseases

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Hurricane and
Wind Damage

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Watershed
Protection

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Alternatives
income to timber

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Spatial Technology (e.g., GIS)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Government Regulations and Incentives	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Role of Private Forests within Ecosystems	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Longleaf Pine Ecosystem Restoration	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sustaining Family Owned Forests	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hunting Lease Management	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Forest Road Maintenance/Construction	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Silvopasture	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Erosion Control	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pond Management	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Are there any other topics that you are interested in and would hope that University of Florida would offer more education about?

Are there any other educational sources that you would use to learn this information?

Please let us know if you have any other comments regarding how the University of Florida can assist in your forest management needs.
