
Simultaneous Study of Forest Certification among Diverse Stakeholders in Virginia

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Forest Certification – Supply-Chain Actors

A group of approximately 20-30 people are gathered in a lush, green forest. They are dressed in casual outdoor attire, including hats, polo shirts, and jeans. The scene is filled with tall trees and dense foliage, with sunlight filtering through the canopy. In the foreground, a large tree trunk is visible, with a red measuring tape wrapped around it. The people are engaged in conversation and observation, suggesting a field study or educational session. The overall atmosphere is one of a natural, outdoor setting.

Landowners



Logging Business Owners

Manufacturers



A photograph of a dense forest with tall, thin trees and lush green foliage. The trees are mostly deciduous with green leaves. The ground is covered in green undergrowth. The sky is visible through the canopy, appearing overcast.

Purpose

Baseline study in support USFS funded project

Objective 1

Measure key variables among supply-chain actors

Objective 2

Study differences/similarities among and between supply-chain actors

Objective 3

Use results to outline potential technical assistance programs

What did we do?

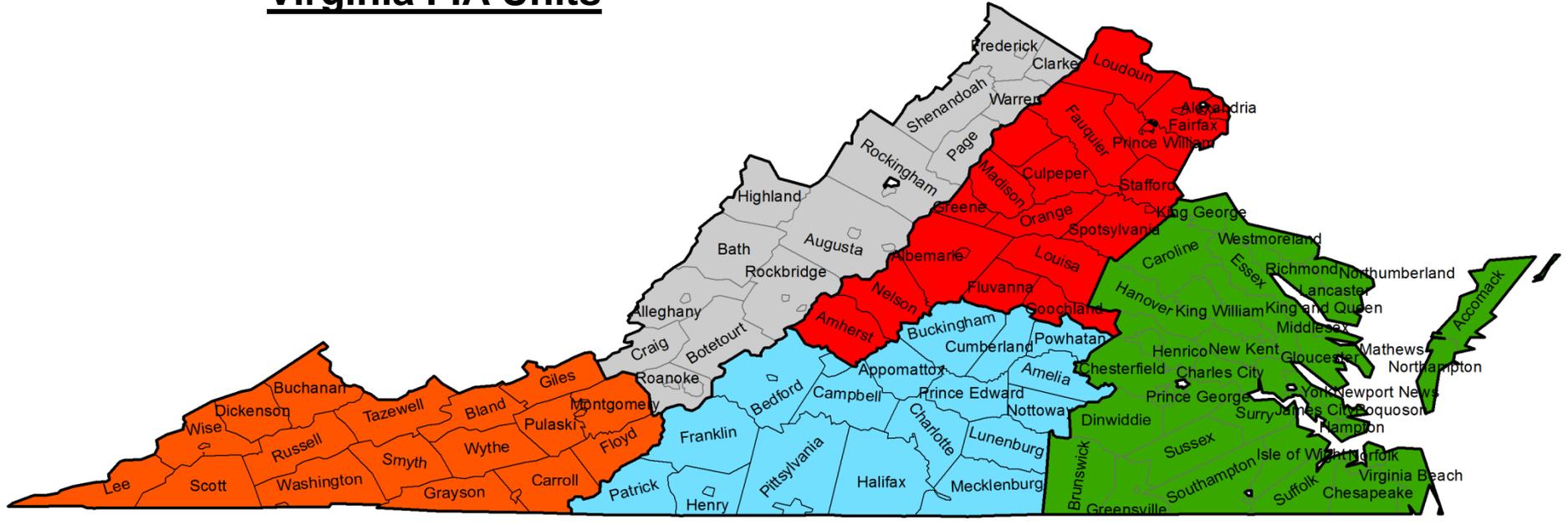
Methods

3 separate, but interrelated surveys

Address unique and shared perspectives (coorientation)

***Landowners:* Cluster sample stratified by USFS FIA regions (24 counties)**

Virginia FIA Units



What did we do?

Methods

3 separate, but interrelated surveys

Address unique and shared perspectives (co-orientation)

Landowners: Cluster sample stratified by USFS FIA regions (24 counties)

What did we do?

Methods

3 separate, but interrelated surveys

Address unique and shared perspectives (co-orientation)

Landowners: Cluster sample stratified by USFS FIA regions (24 counties)

Loggers: Census of VA's NAID System

What did we do?

Methods

3 separate, but interrelated surveys

Address unique and shared perspectives (co-orientation)

Landowners: Cluster sample stratified by USFS FIA regions (24 counties)

Loggers: Census of VA's NAID System

Manufacturers: Census of VA's manufacturer operation database

Who responded?

Total = 811 usable responses; 36% weighted response rate

Landowners

Adjusted response rate of 34% (380 usable)

Logging Business Owners

Adjusted response rate of 40% (364 usable)

Manufacturers

Adjusted response rate of 32% (67 usable)

Non-response

What matters?

Aspects

Awareness, understanding low

Objectives not always congruent

Advantages questioned

Productivity and costs a concern

Transparency/value inhibitors

Supply chain dynamics (consumer versus business markets)

Small- and Medium-sized business opportunities and constraints

Outline

Landowners

Logging Business Owners

Wood Product Manufacturers

Synthesis

Potential Next Steps

A group of approximately 20-30 people are gathered in a lush, green forest. They are dressed in casual outdoor attire, including hats, polo shirts, and jeans. The scene is filled with tall trees and dense foliage, with sunlight filtering through the leaves. A prominent tree trunk in the foreground has a red measuring tape or band around it. The people are engaged in various activities, some looking towards the center of the group, others looking at the trees or the ground. The overall atmosphere is one of a field study or educational session.

Landowners

Woodland Owner Survey

Mailed to 1456 – 2 pages (front/back); 380 Usable

Neutral description of forest certification provided

4 sections

Your woods; Forest certification

Woodland management; General owner information

Willingness across incremental costs per acre

Results presented in this section primarily relate to

Owner characteristics

Awareness of certification

Responses to questions about potential benefits

Probability of participation across varying levels of cost per acre

Woodland Owners

Ownership by Virginia FIA Unit

Total

Wooded Acres – 106,957

Northern Mountains

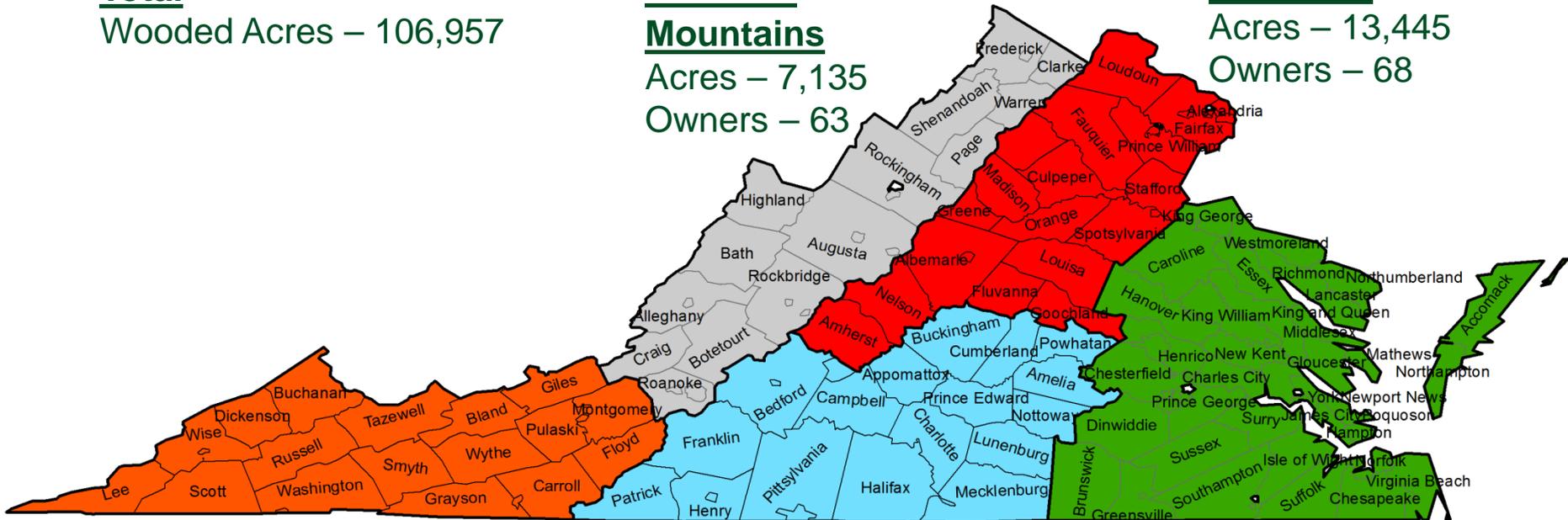
Acres – 7,135

Owners – 63

Northern Piedmont

Acres – 13,445

Owners – 68



Southern Mountains

Acres – 7,042

Owners – 54

Southern Piedmont

Acres – 7,438

Owners – 73

Coastal Plain

Acres – 71,897

Owners - 116

Characteristics

Ownership Patterns

Average Forested Holding: 290 acres

Most Common Size: 60 acres

23% have written management plans

52% have cut commercial timber at least once

18.6% (64) have heard of forest certification before (12% NWOS)

Only 16 own certified land (4.2%): (4.4% NWOS)

SFI – 3 owners with 15,480 acres

FSC – 6 owners with 598 acres

ATFS – 7 owners with 5,079 acres

NWOS = National Woodland Owner Survey

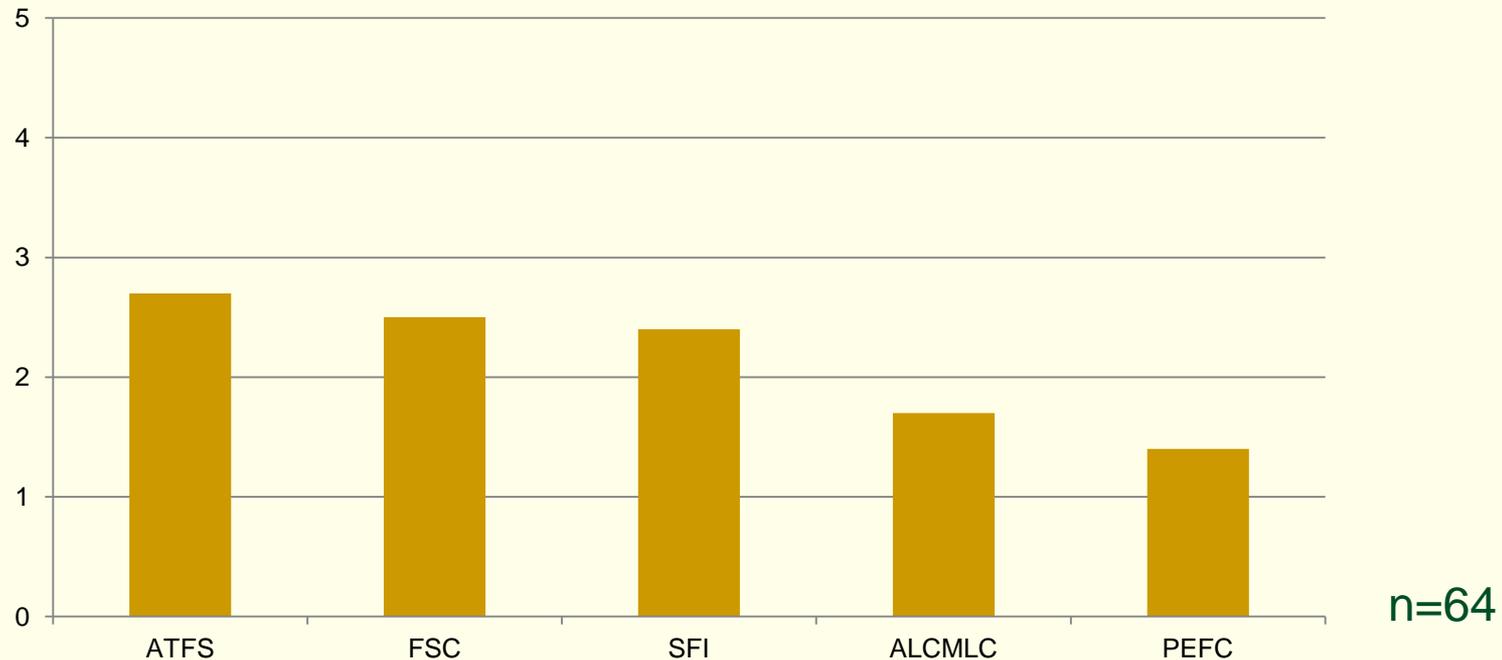
SFI = Sustainable Forestry Initiative

FSC = Forest Stewardship Council

ATFS = American Tree Farmer System

Program Awareness

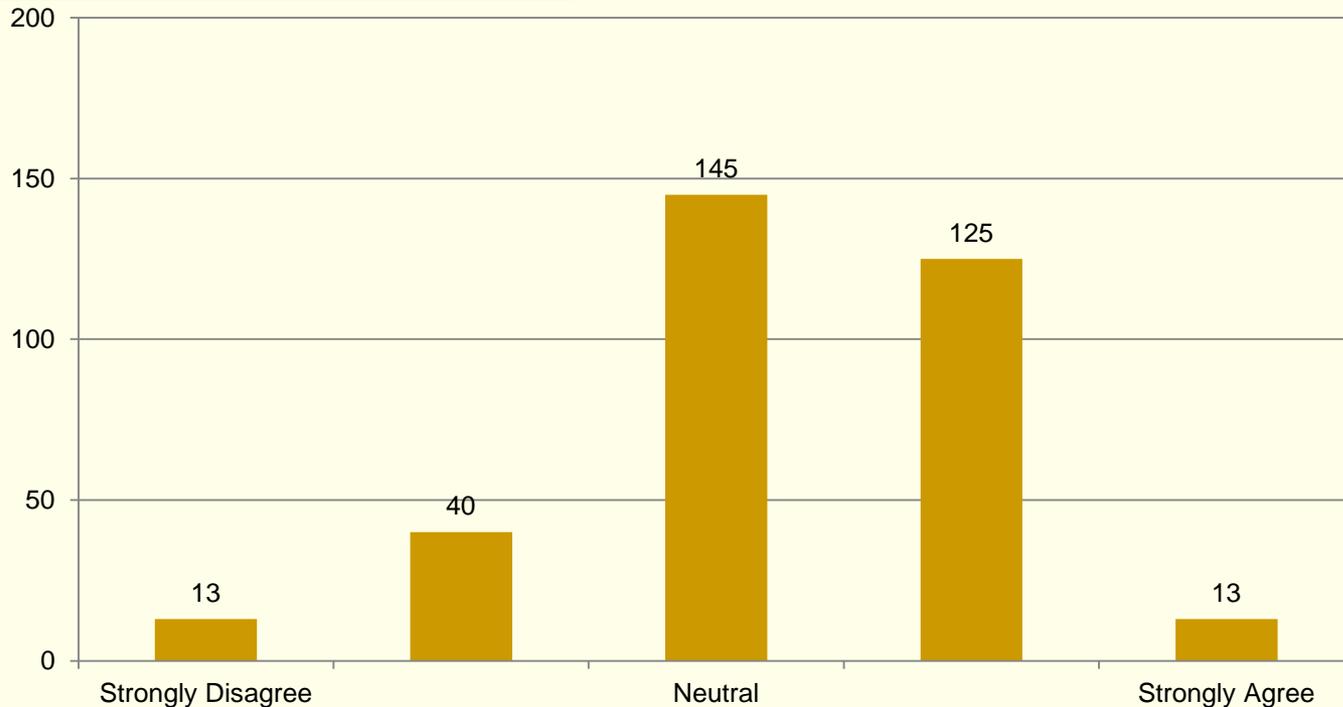
Specific Programs (Awareness Scale 1 to 5)



ALCMLC = American Loggers Council Master Logger Certification
PEFC = Program For the Endorsement of Forest Certification

Benefit Assessments

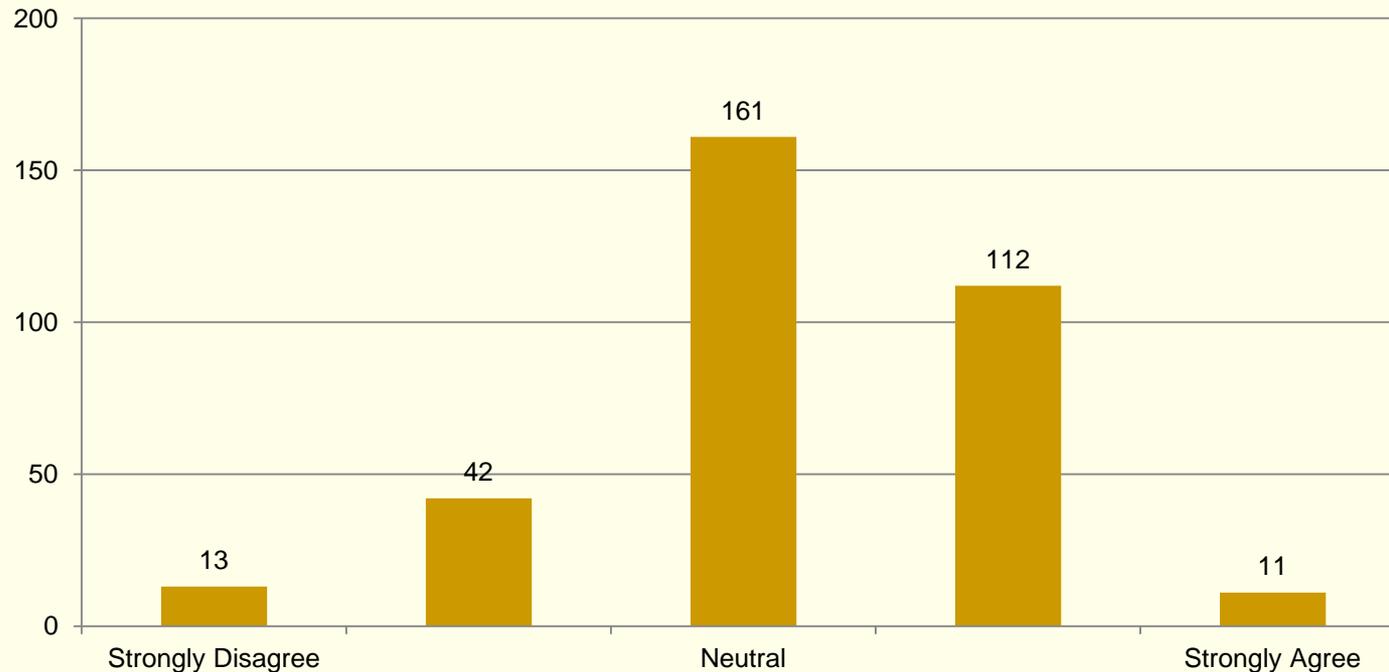
Increase Marketability of Harvested Products (Agreement Scale 1 to 5)



45% agree or strongly agree

Benefit Assessments

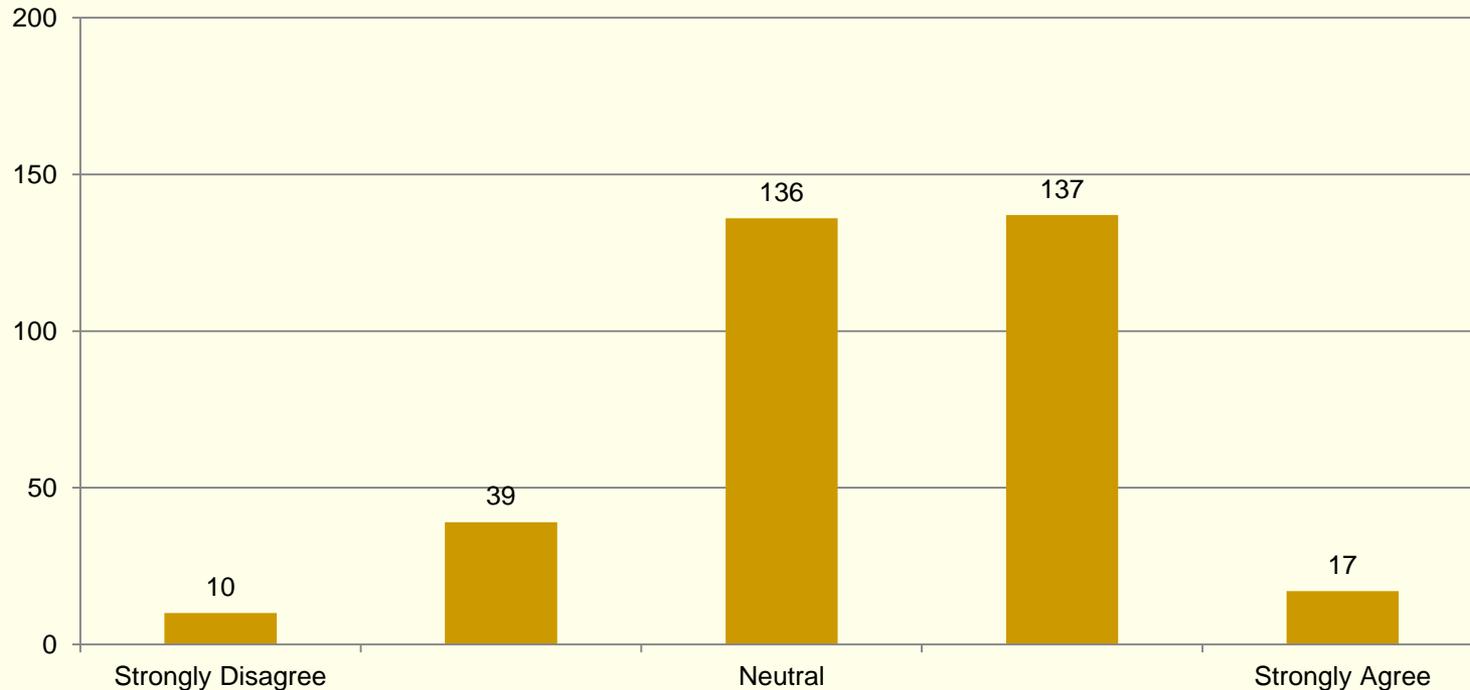
Increase Payment for Harvested Products (Agreement Scale 1 to 5)



Nearly half neutral, but 1/3 agree or strongly agree

Benefit Assessments

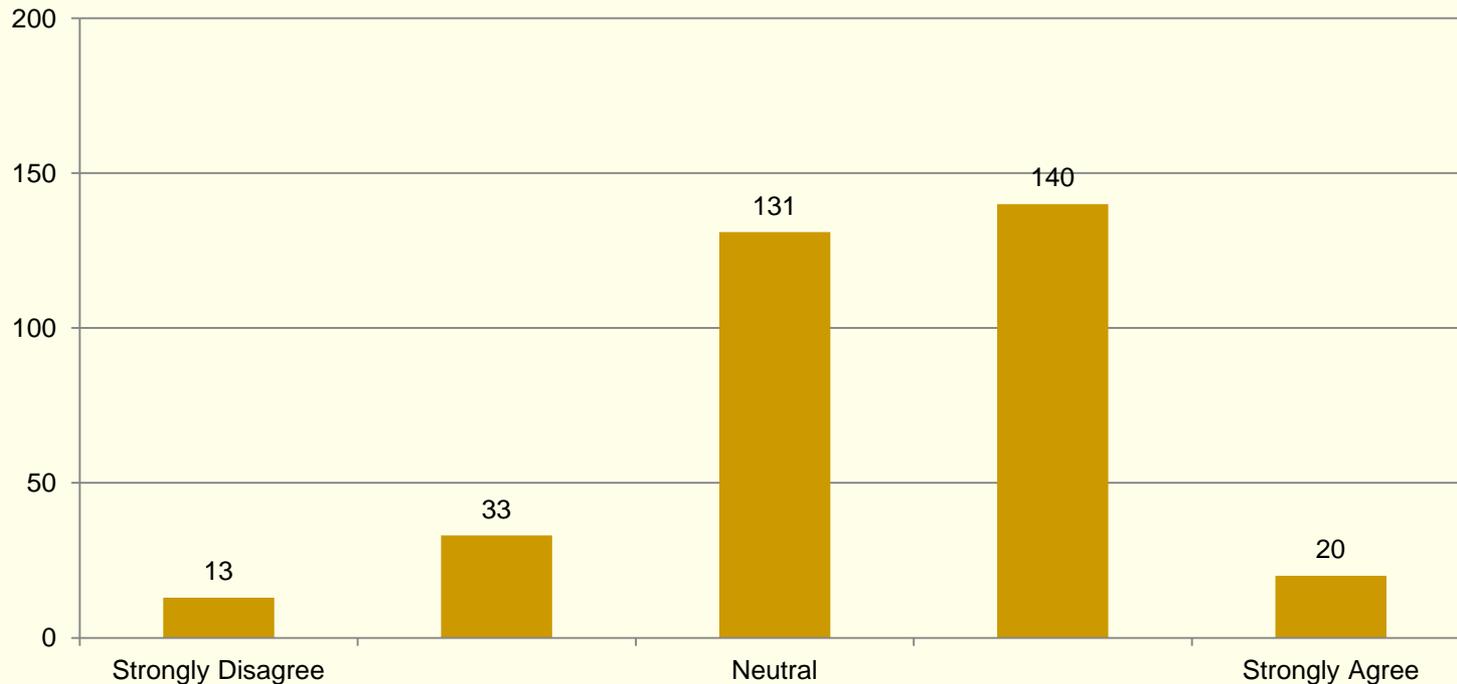
Increase Resale Value of the Land (Agreement Scale 1 to 5)



Close to half agree or strongly agree

Benefit Assessments

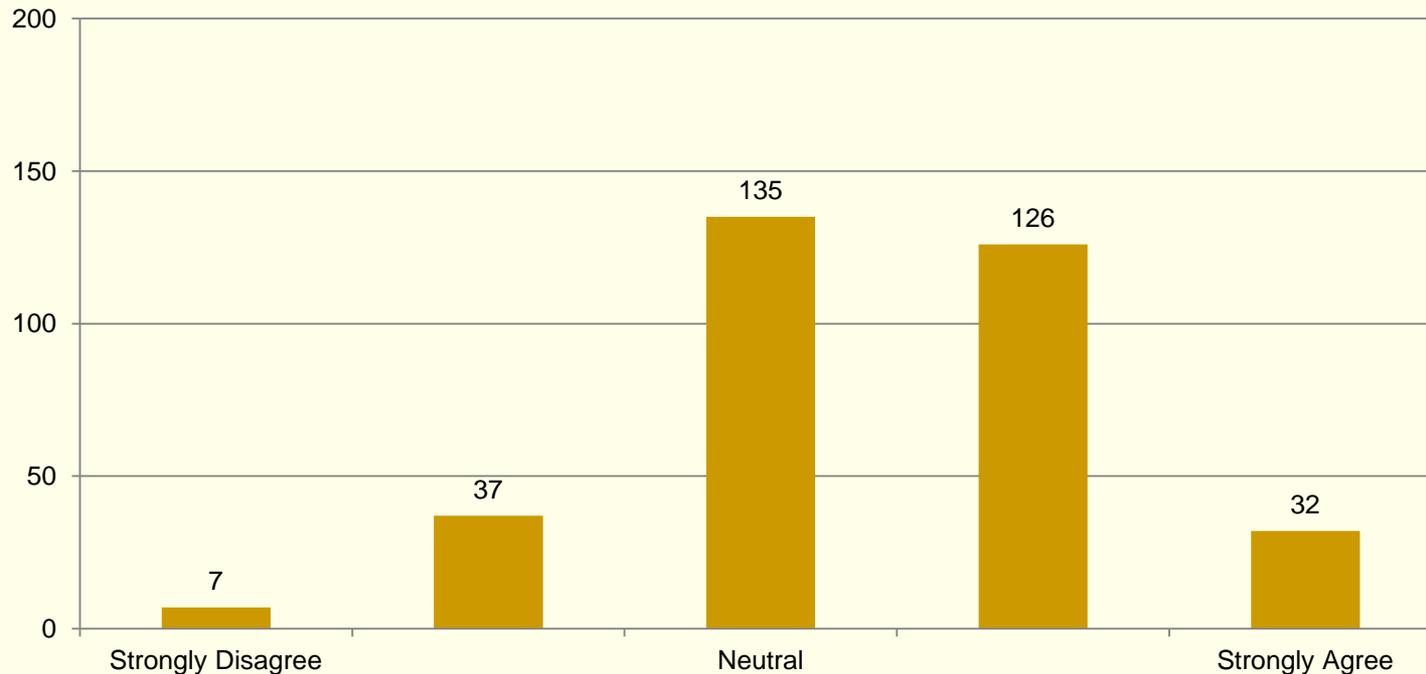
Improve Forestland Productivity (Agreement Scale 1 to 5)



Nearly half agree or strongly agree

Benefit Assessments

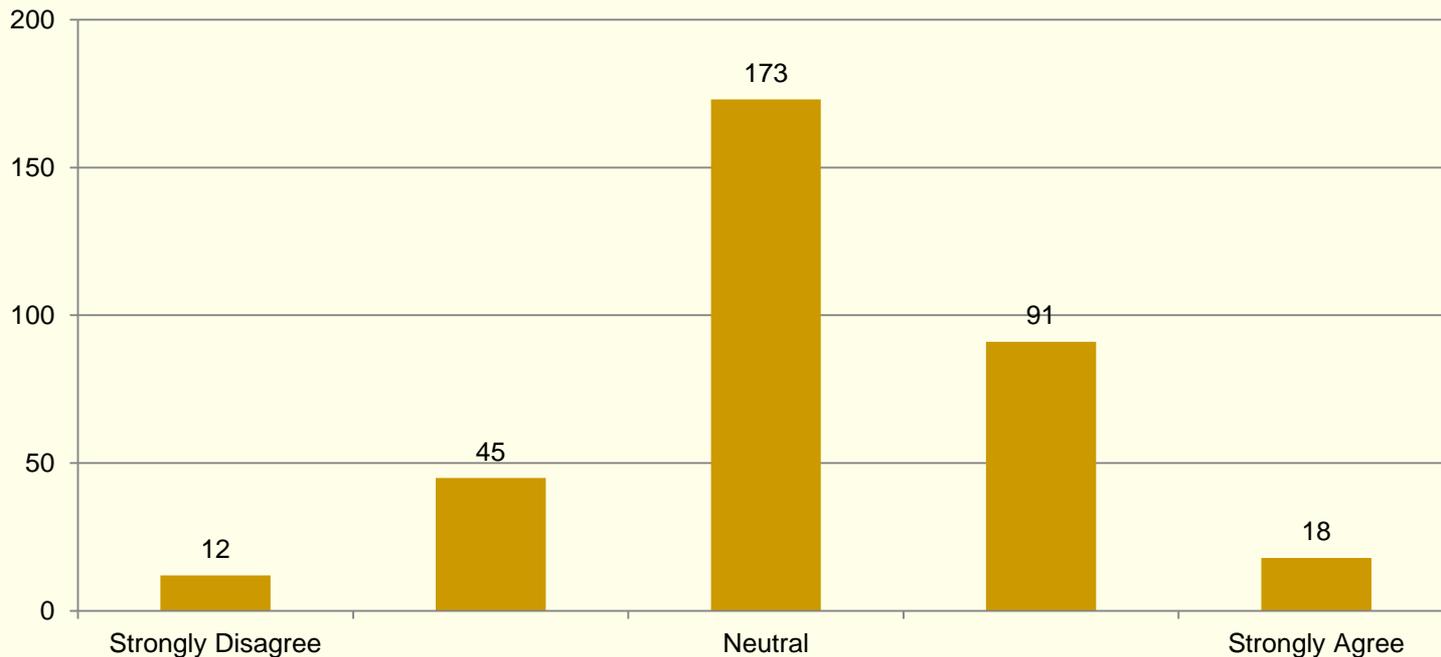
Decrease Owner Control (Agreement Scale 1 to 5)



~40% neutral, almost 50% agree or strongly agree

Need to Participate

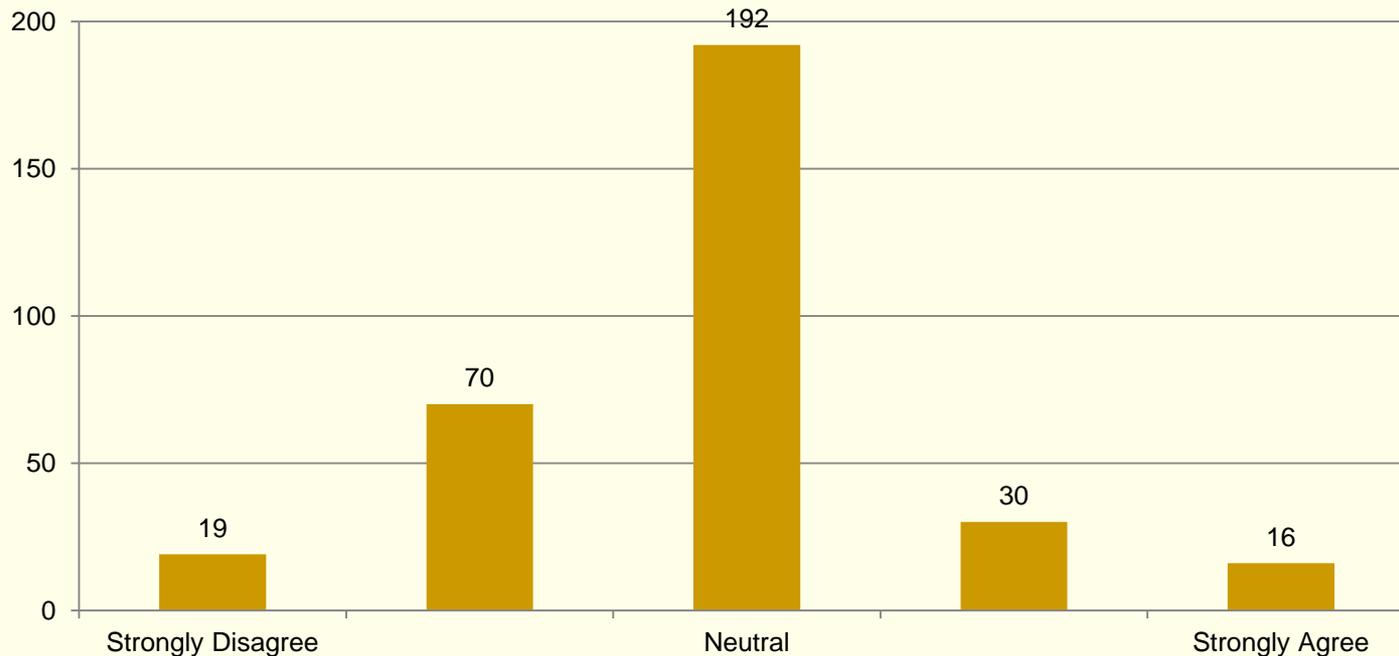
Likely to Become Increasingly Necessary (Agreement Scale 1 to 5)



Just under 30% agree or strongly agree

Opposition to Participation

Never Certify My Forestland (Agreement Scale 1 to 5)



Just under 15% agree or strongly agree

Benefits vs. Management Assistance

Correlations

Average Benefit Assessment Correlates with Average Belief that Woodland Management Assistance Programs Benefit Landowners ($r=.49$)

Confusion noted in comments

**Many associate certification systems with government
But understanding recognized as limited**

To a lesser degree, these two measurements relate to an owner's opposition to certifying their woodlands

Probability of Participation (\$/acre)

Method

Valuation proxy

Equal and random assignment of 5 exponential costs/acre

\$0; \$2.50; \$5; \$10; \$25

Response distribution

\$0 – 61 \$2.50 – 61

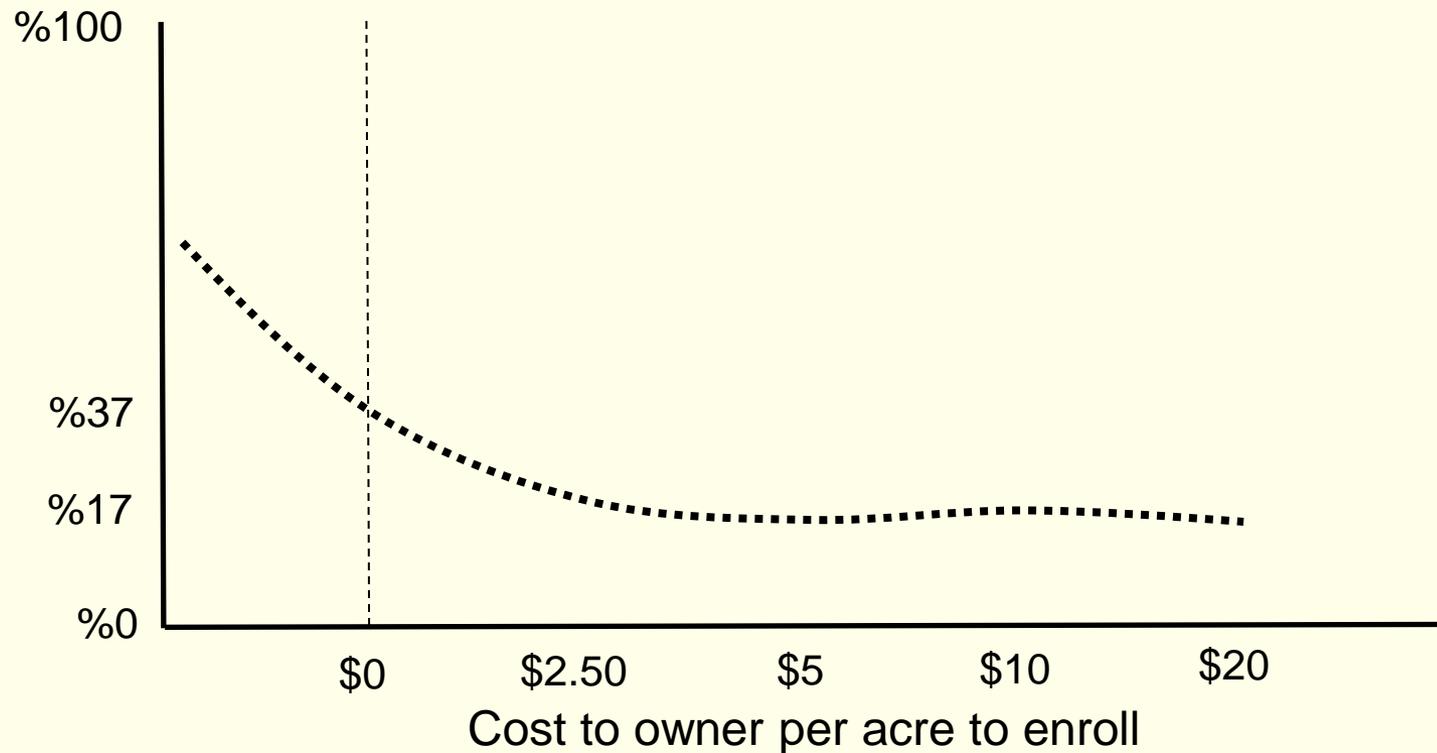
\$5 – 53 \$10 – 61

\$20 – 63

Respondents asked whether they would be willing to certify their land if they had to pay this price per acre to enroll and receive associated benefits

Tests show acreage owned not related to response

What did we find?



17% could equal ~14,700 acres
37% could equal ~32,000 acres

What did we learn?

Certification

Small % of owners are aware of certification programs (ATFS)

Small % of those owners are actually participating

They own notable acreage (reflection of program – SFI large)

Benefits

Resale value and improved productivity were most notable

Associated benefits (neutral in general)

Decrease in control is prominent

Need not seen as increasing among many

Only small amount firmly opposed

What did we learn?

Perspectives on Management Asst. Programs and Cost

Relates to willingness

Belief in the value of assistance programs (observed tie-in)

No-cost is favorable to a little over 1/3; costs stable at about 17%



Logging Business Owners

Logging Business Owner Survey

Preliminary results from a survey of Virginia logging business owners as part of a project for:

“Reducing forest certification barriers for non-industrial private forest landowners (NIPFs)”

Scott Barrett

Extension Associate – Forest Operations
Virginia SHARP Logger Program Coordinator

Logger Business Owner Survey

- Population consisted of VA based logging businesses with an NAID #
- Mail survey -1 Page – front and back
- 4 sections
 - Business owner information
 - Company information
 - Forest land certification section (across the entire supply chain)
 - Logger certification section
- Results presented in this section primarily relate to logger certification

Logging Business Owner Questionnaire (Front and Back Only)

Do you own a Virginia-based logging business?
 YES ___ Please complete and return the survey NO ___ Please stop here and return the survey

Part 1: Company Information

1. What county in Virginia do you consider to be the center of your work area? _____
2. What is the average total production per week for your business? _____ loads
3. How many logging crews does your business operate? _____ crews

Part 2: Forest Certification.

Forest certification is a voluntary program with potential forest management and marketing benefits that sets standards for the economic, social, and environmental sustainability of woodlands and certifies products harvested as *sustainable* or *green*. Certification guidelines address protection of water quality and soil, special sites, wildlife habitat, pest management, and promote responsible harvesting practices. A written management plan is required and third party auditors can check to verify the plan is being followed.

How familiar are you with these certification programs? (Circle only ONE number for each)

CERTIFICATION PROGRAM	FAMILIARITY				
	Never Heard of it				Very Familiar
Sustainable Forestry Initiative (SFI)	1	2	3	4	5
Forest Stewardship Council (FSC)	1	2	3	4	5
American Tree Farm System (ATFS)	1	2	3	4	5
American Loggers Council Master Logger Certification	1	2	3	4	5
Program For the Endorsement of Forest Certification (PEFC)	1	2	3	4	5

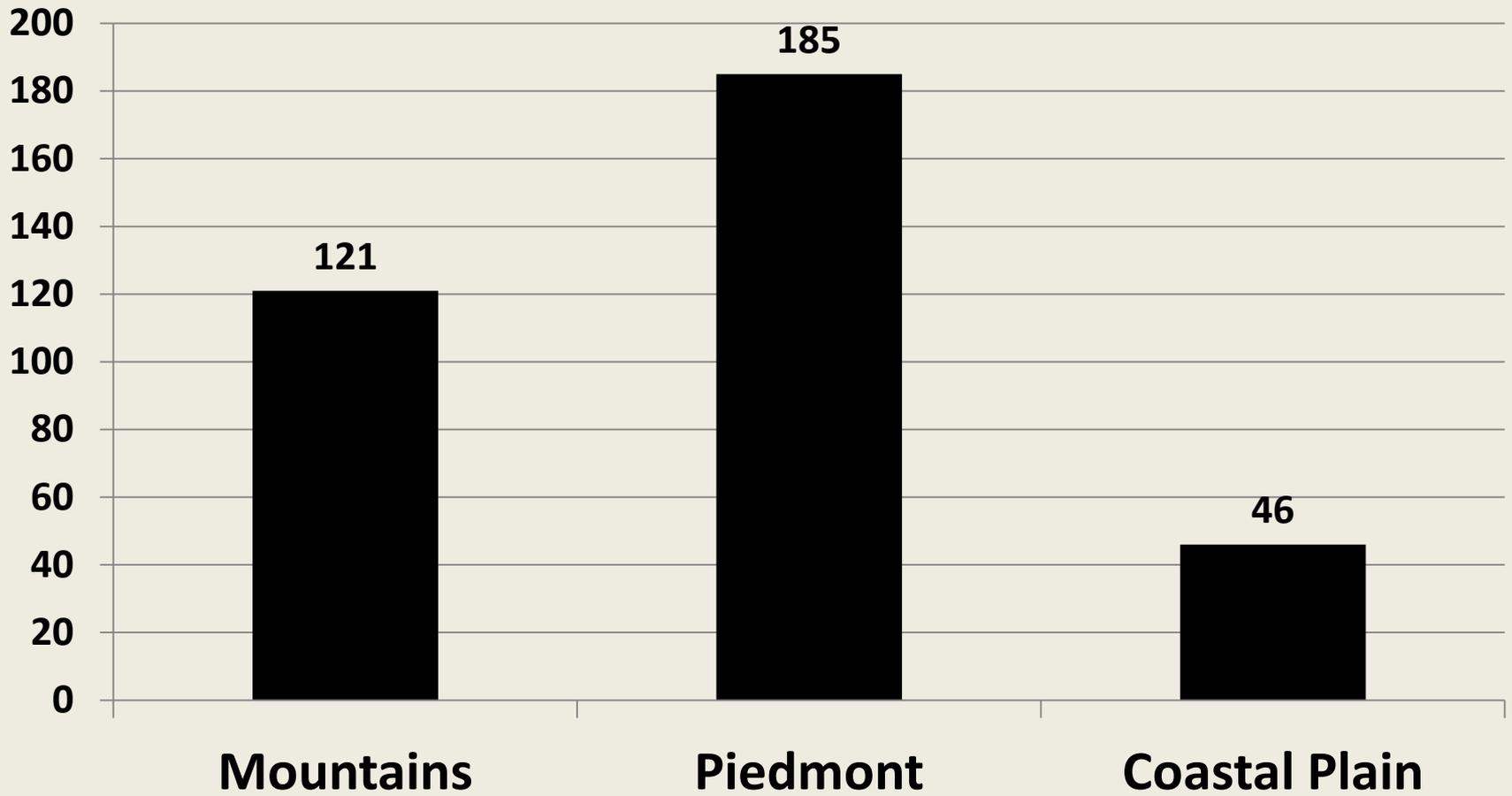
To the best of your ability, please note your agreement with the following statements. (Circle only ONE number)

STATEMENTS	AGREEMENT				
	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
I understand what must be done to certify woodlands	1	2	3	4	5
I think that increasing the use of forest certification is a good idea	1	2	3	4	5
Increasing forest certification will improve economic opportunities for my business	1	2	3	4	5
Virginia would benefit if the use of forest certification increased	1	2	3	4	5
I think that increasing the number of harvests on certified forests would improve the overall image of logging businesses	1	2	3	4	5
In general, wood product manufacturers would think that increasing the use of forest certification is a good idea	1	2	3	4	5
In general, private woodland owners would think that they understand what must be done to certify woodlands	1	2	3	4	5
In general, private woodland owners would think that increasing forest certification will improve economic opportunities for their woodlands	1	2	3	4	5
In general, wood product manufacturers would think that increasing forest certification will improve economic opportunities for their company	1	2	3	4	5
In general, wood product manufacturers would think that they understand what must be done to certify woodlands	1	2	3	4	5
In general, private woodland owners would think that increasing the use of forest certification is a good idea	1	2	3	4	5
In general, private woodland owners would think that increasing the certification of private woodlands will improve their image	1	2	3	4	5
In general, wood product manufacturers would think that increasing the use of certified wood will improve the image of their industry	1	2	3	4	5

Business and owner information

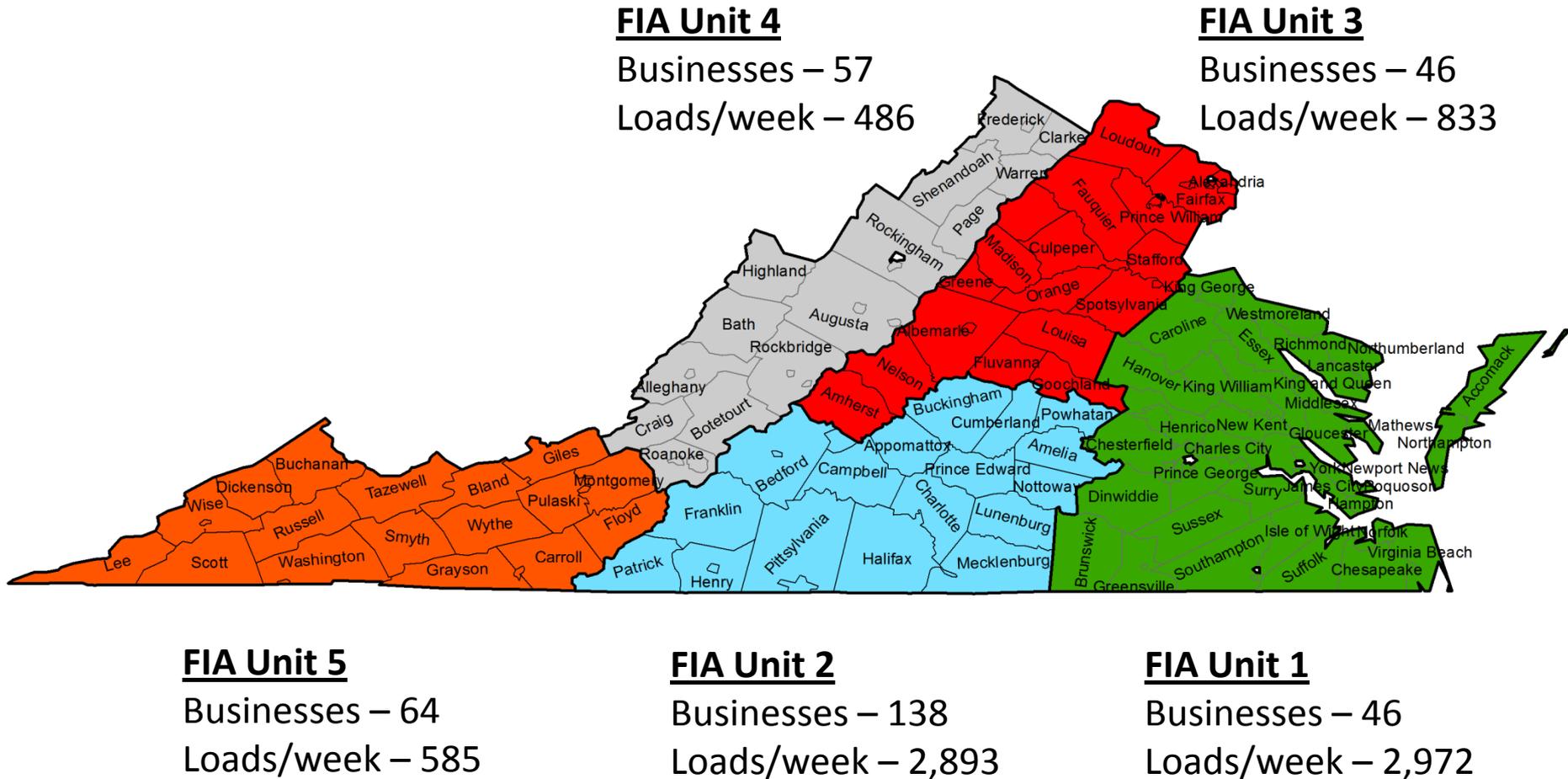
- Average age = 51 years
- Owned their own business for 21 years
- Average production of 23.3 loads per week
(Mountain =9.8 Piedmont = 21.7 Coastal= 65.4)
 - Estimated total of 7-10 million tons per year of production from respondents
- 60 % of logging business owners are also forest landowners (4% have certified forest land)

Survey responses by physiographic region



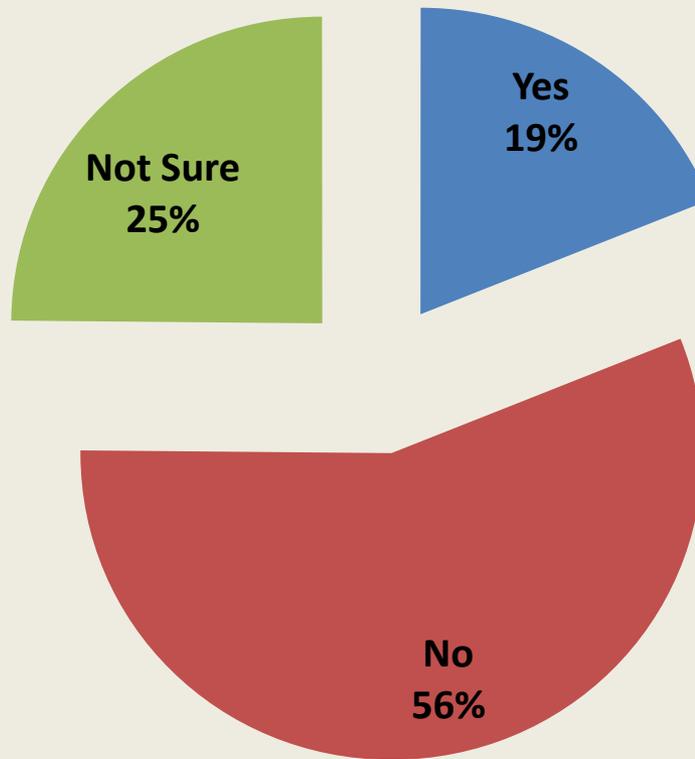
Logging Businesses:

Response and Production by Virginia FIA Unit

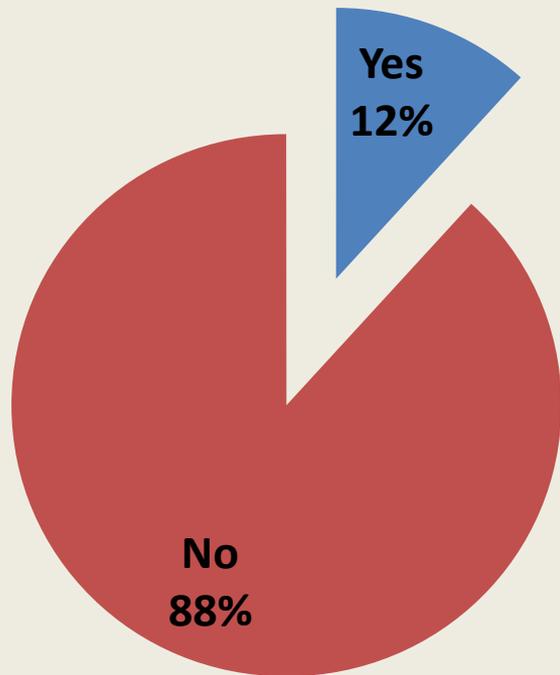


Have you ever harvested timber on certified forest land?

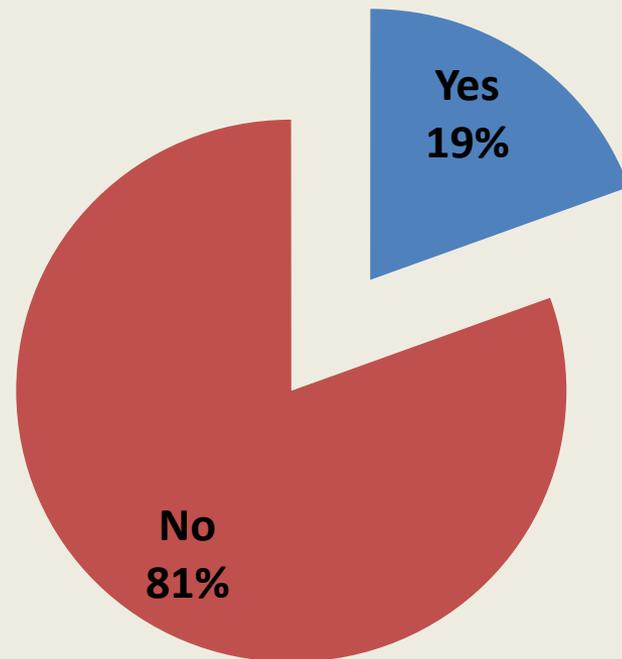
YES - NO - NOT SURE



Have private woodland owners ever asked you about forest certification?

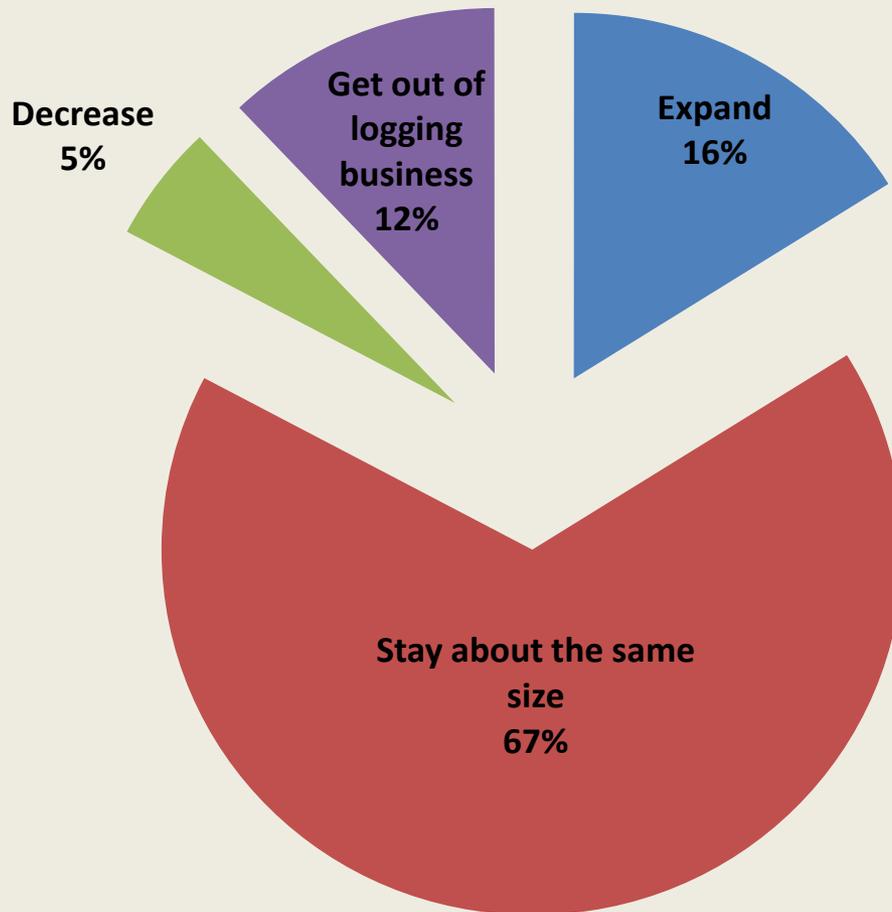


Have wood product manufacturers ever asked you to supply certified wood?



In the next 5 years do you plan for your logging business to:

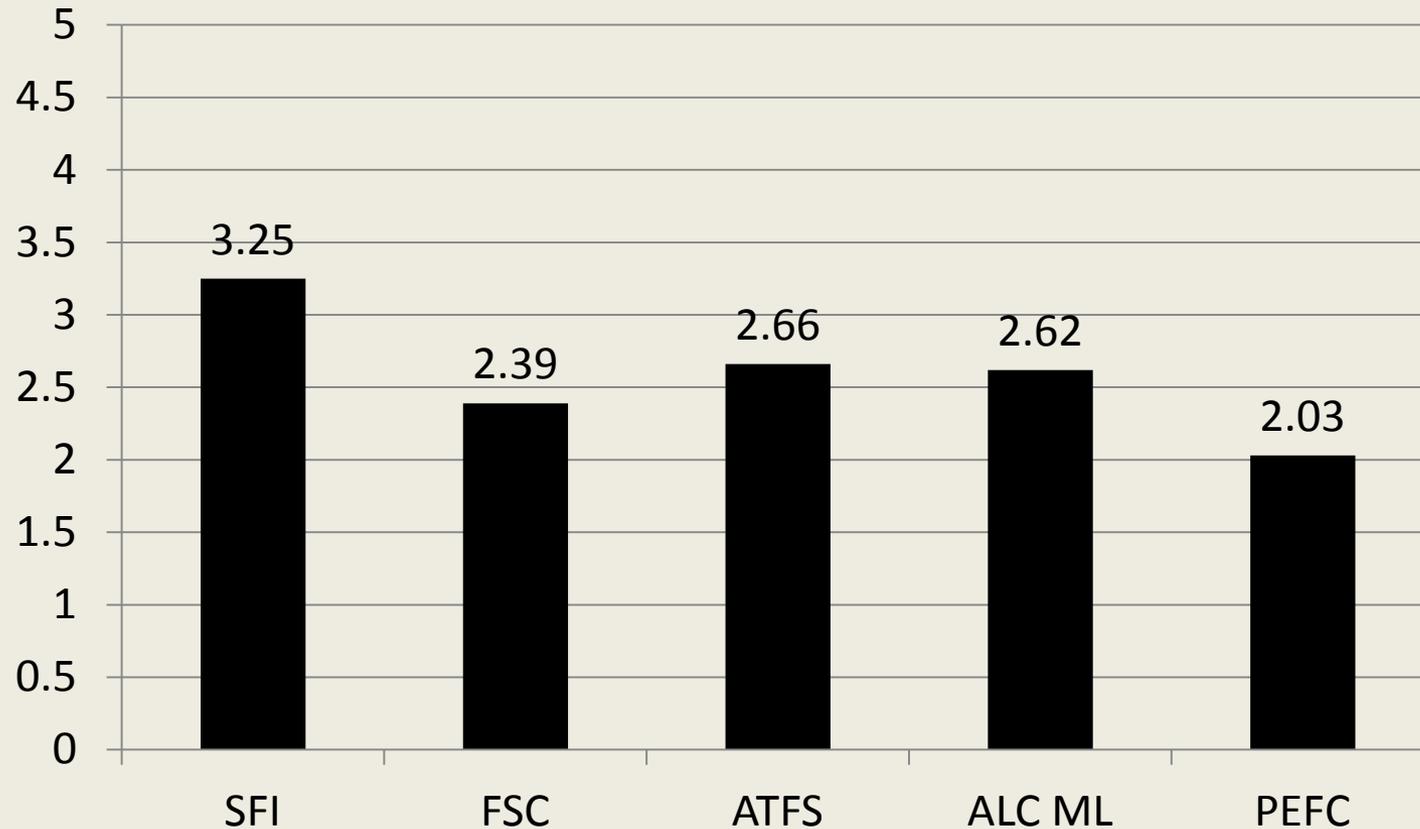
expand - stay about the same size - decrease - get out of logging business



How familiar are you with these certification programs? (Circle only ONE number for each)

CERTIFICATION PROGRAM

	Never Heard of It				Very Familiar
Sustainable Forestry Initiative (SFI)	1	2	3	4	5
Forest Stewardship Council (FSC)	1	2	3	4	5
American Tree Farm System (ATFS)	1	2	3	4	5
American Loggers Council Master Logger Certification	1	2	3	4	5
Program For the Endorsement of Forest Certification (PEFC)	1	2	3	4	5



Logger Training vs. Certification

Logger Training

- Virginia and many other states have logger training programs (typically meet SFI training requirements)
- Require attendance at specified training courses to meet training requirements
- No verification of performance standards or other criteria
- No mechanism to remove “bad actors” or those that don’t or can’t meet certain standards

Logger Certification

- Typically outlines specific training **AND performance** criteria
- Differing performance standards – or “how high you set the bar”
- Mechanism in place to verify compliance with standards and remove those that do not meet the performance criteria
- A number of state certification programs as well as the ALC Master Logger Certification and others

Logger Certification

It is possible that in the future some forest certification programs may encourage or require the use of certified loggers for harvesting timber on certified woodlands.

A logger certification program would be different than the current Virginia SHARP Logger Program.

Virginia DOES NOT currently have a logger certification program.

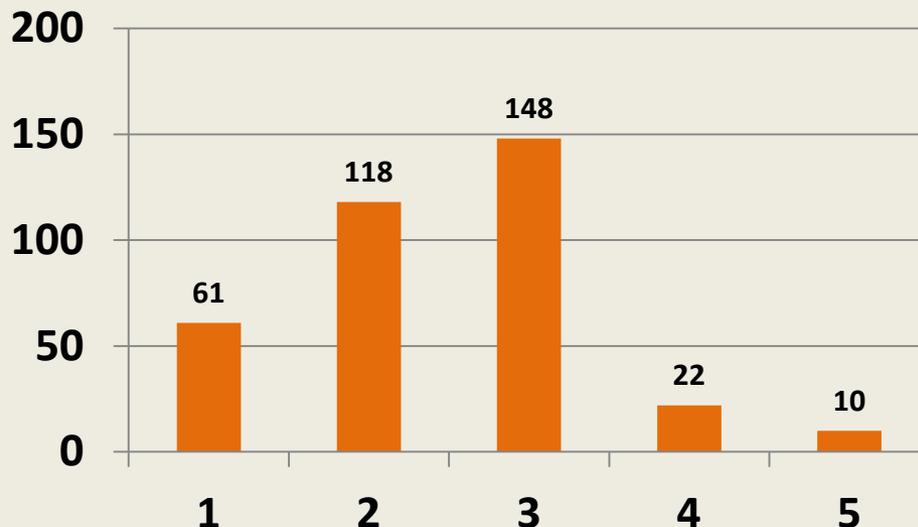
A certified logger program would be voluntary and require certain logging standards such as following BMPs and existing laws and regulations, as well as meeting certain business management criteria. From time to time **field and office audits would be required** to verify compliance.

Please indicate your agreement with the following statements
(Circle only one number for each)

AGREEMENT: Strongly Disagree Disagree Neither Agree nor Disagree Agree Strongly Agree
1 **2** **3** **4** **5**

I would never consider certifying my logging business

Average Response = 2.45



Some general trends

Respondents that agree that

“Logger certification is a good idea”

- Tend to have higher production (loads per week)
- Tend to be younger (although not a strong correlation)
- Are newer to the logging business
- More likely to have plans to expand their business
- More likely to be in the Piedmont or Coastal plain region

What do you think would be the advantages and/or disadvantages of being a certified logging business?

- Improved logger image
- Even the playing field-separate the good loggers from the bad.
- More profit and timber for my business
- Landowners would feel they are getting a more qualified logger.
- It would give loggers a better image
- Landowner would rather have certified logger harvest their timber.
- I would like to be certified in VA. It would separate the crooks from the honest loggers and get more respect at mills.
- Would help market our services
- More professional logging crews, more professional loggers

What do you think would be the advantages and/or **disadvantages** of being a certified logging business?

- Cost and time
- Just more red tape
- This would be something else that would cost more money and time to do and would not make more money for doing.
- More paperwork, increase cost, bureaucratic regulations.
- More rules and paperwork
- Would put more burden on me and my business
- The mills are going to take the cheapest price to log certified or not.
- Increased cost/work no increased income
- I don't have enough information to make a decision at this point

Another way of looking at the data

	Agree	Disagree
Logger certification is a good idea	45%	29%
Logger certification would not improve the image of Virginia's logging businesses	28%	42%
Logger certification could help Virginia logging businesses market their services	43%	26%
Certified loggers would have a competitive advantage over non-certified loggers	50%	26%
I would consider certifying my logging business even if I had to pay an annual auditing and participation cost of \$1,000	11%	72%
I would consider certifying my logging business only if there were no costs involved	56%	17%
I don't believe there would be enough benefit to justify the costs of certifying my logging business	51%	18%
I would consider certifying my logging business if I were added to a list of preferred harvesters that landowners were encouraged to use	65%	13%
I would consider certifying my logging business if doing so increased the price paid for the timber I produce	83%	8%
I would consider certifying my logging business if I could gain access to more timber markets	73%	9%
Even if I wanted to, I don't think my logging business would be able to meet the standards of logging certification	12%	52%
I would never consider certifying my logging business	9%	50%

Summary

- Don't have an overwhelming majority of loggers that agree certification is a good idea (45%)
- Most business owners think they would be able to meet certification standards
- Cost of certification is a major concern
- Over half agree that there probably won't be enough benefit to justify the cost
- A lot of owner's opinions are in the middle (neither agree or disagree)
- More loggers agree than disagree that logger certification
 - would be a good idea
 - would improve the image of logging businesses
 - offer a competitive advantage
 - help them market their services
- Only 9% agree that they would never consider certifying their business
- Not necessarily a question of the benefits of logger certification, but do the benefits justify the costs.

Manufacturers



Virginia Manufacture's Opinions Regarding Forest Certification

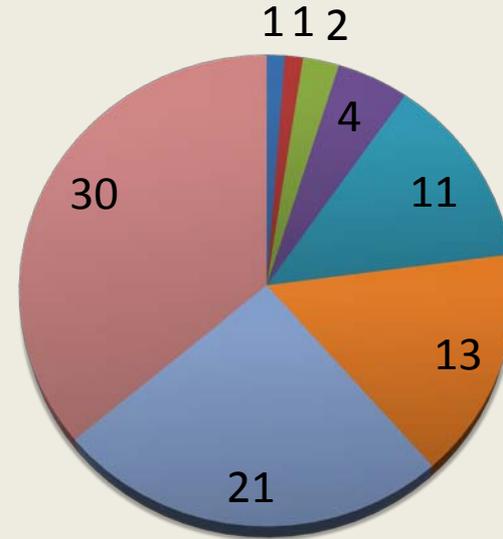
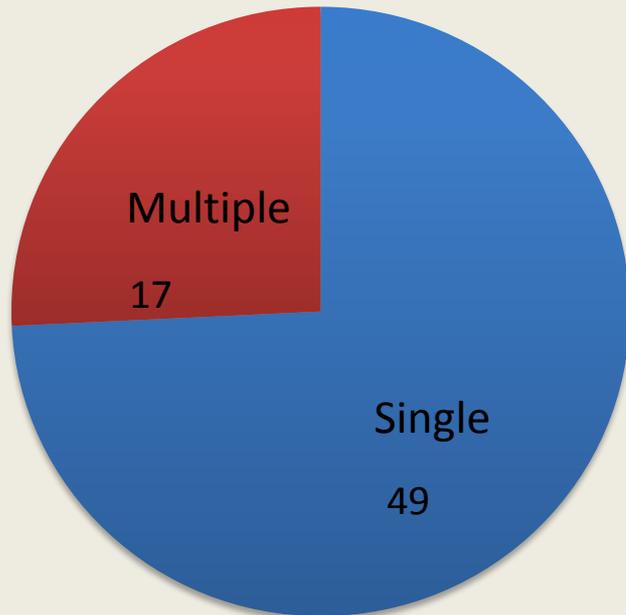
Brian Bond

Associate Professor

Manufacturers Demographics

Mill Type

Single or Multiple Facility?



Sawmills make up 81% of respondents

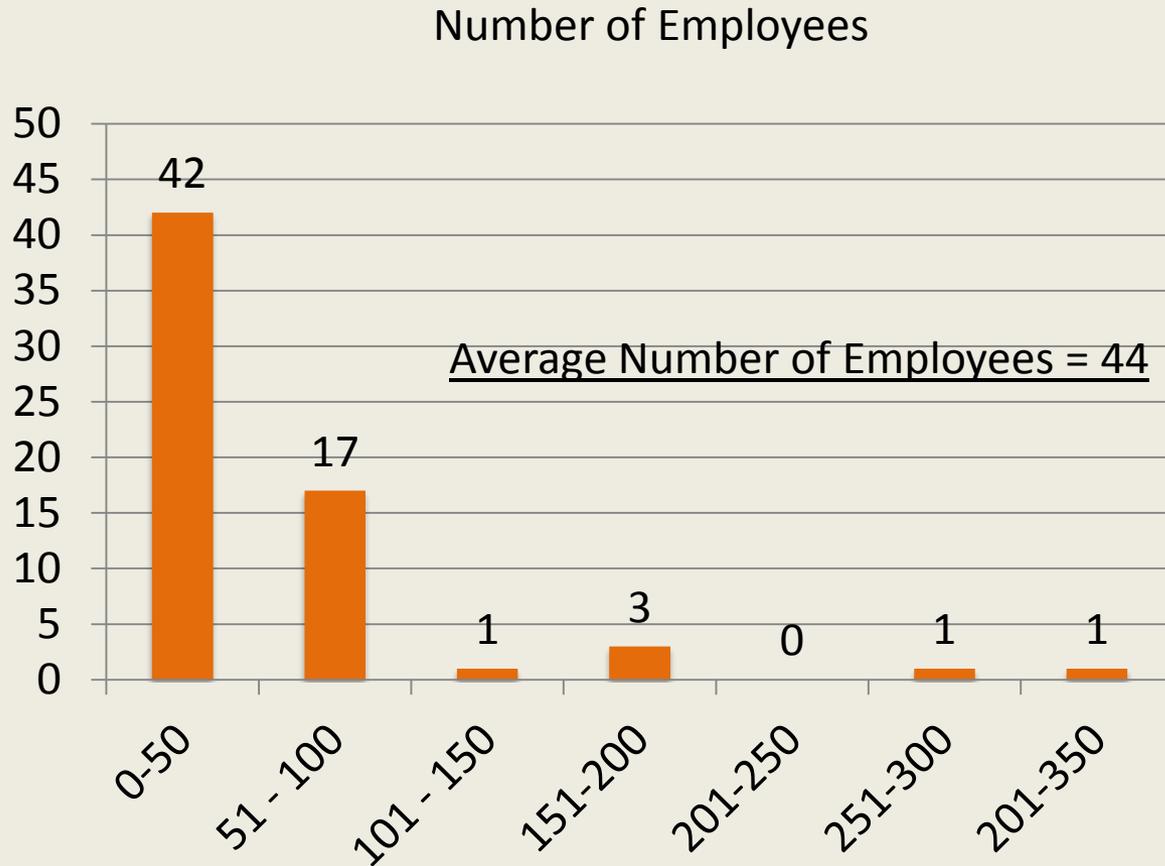
- Composite
- Veneer
- Paper Mill
- Chip Mill
- Hard/Soft Mill
- Softwood Mill
- Other
- Hardwood Mill

Manufacturers Demographics

“Other”

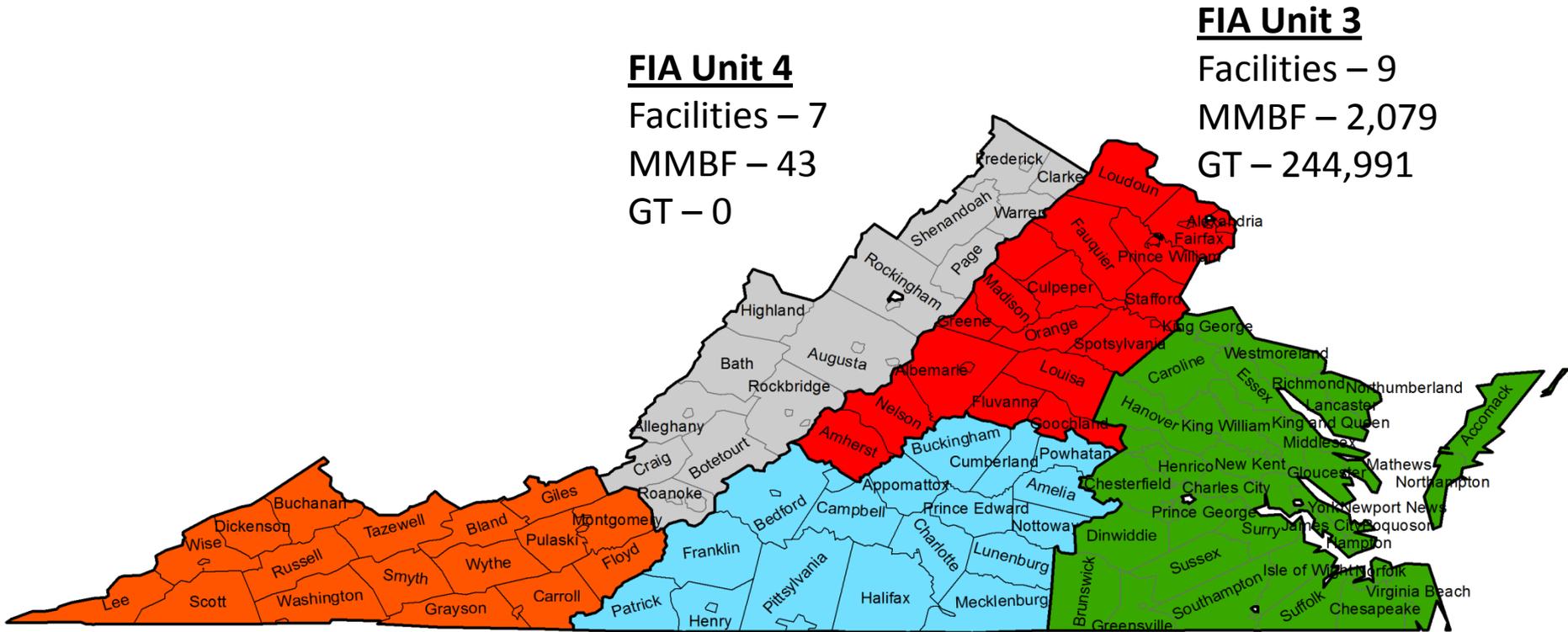


Manufacturers Demographics



Primary Products Manufacturers:

Response and Production by Virginia FIA Unit



FIA Unit 4

Facilities – 7

MMBF – 43

GT – 0

FIA Unit 3

Facilities – 9

MMBF – 2,079

GT – 244,991

FIA Unit 5

Facilities – 12

MMBF – 250,157

GT – 550,000

FIA Unit 2

Facilities – 26

MMBF – 31,043,471

GT – 1,082,515

FIA Unit 1

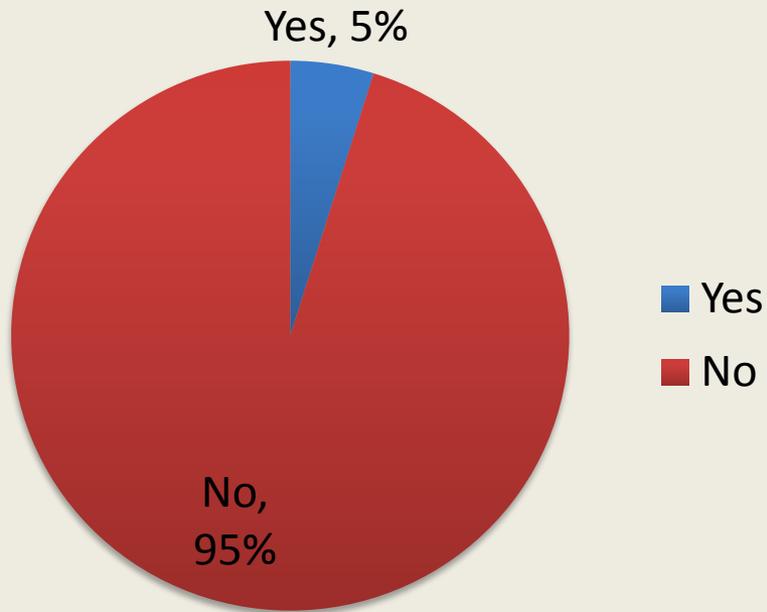
Facilities – 18

MMBF – 100.6

GT – 350,144

Demographics

**Do you own certified land
in VA?**



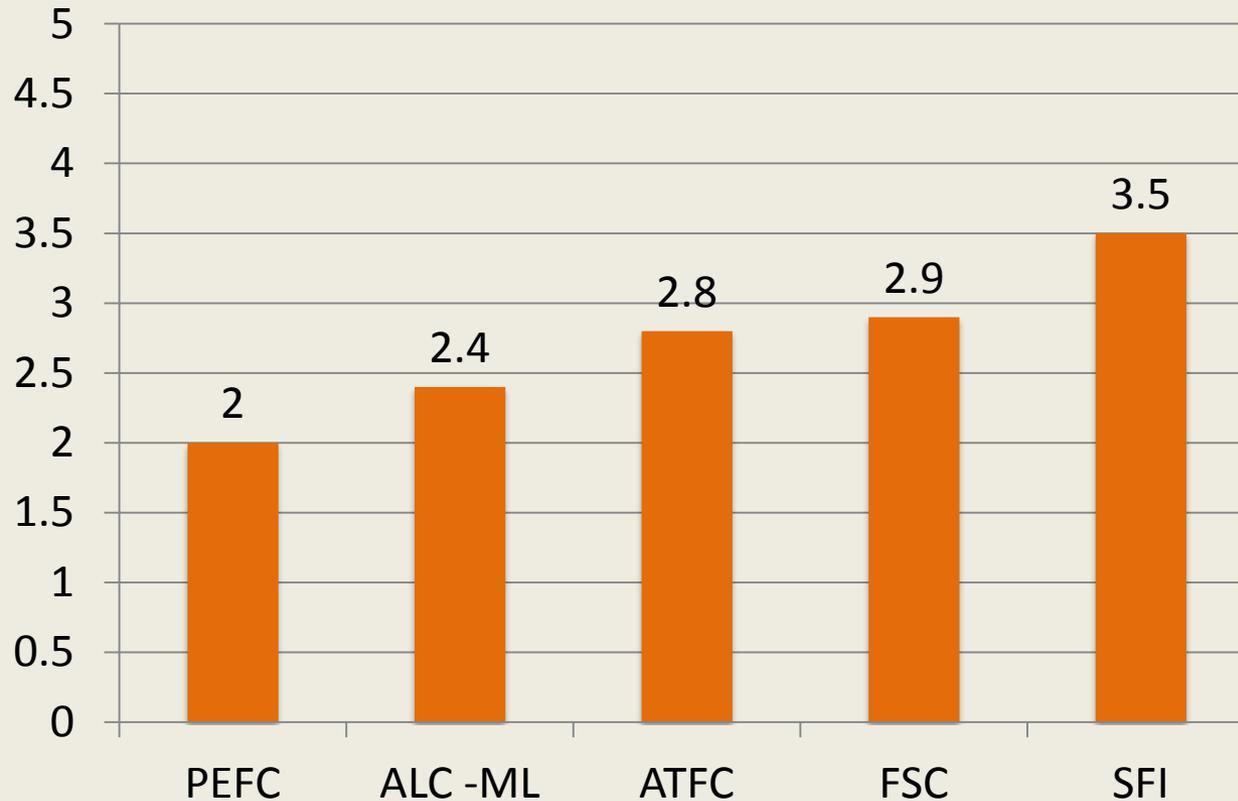
If yes, how many acres?

- 1000
- 700
- 42

How familiar are you with these certification programs? (Circle only ONE number for each)

CERTIFICATION PROGRAM

	Never Heard of It				Very Familiar
Sustainable Forestry Initiative (SFI)	1	2	3	4	5
Forest Stewardship Council (FSC)	1	2	3	4	5
American Tree Farm System (ATFS)	1	2	3	4	5
American Loggers Council Master Logger Certification	1	2	3	4	5
Program For the Endorsement of Forest Certification (PEFC) 1		2	3	4	5

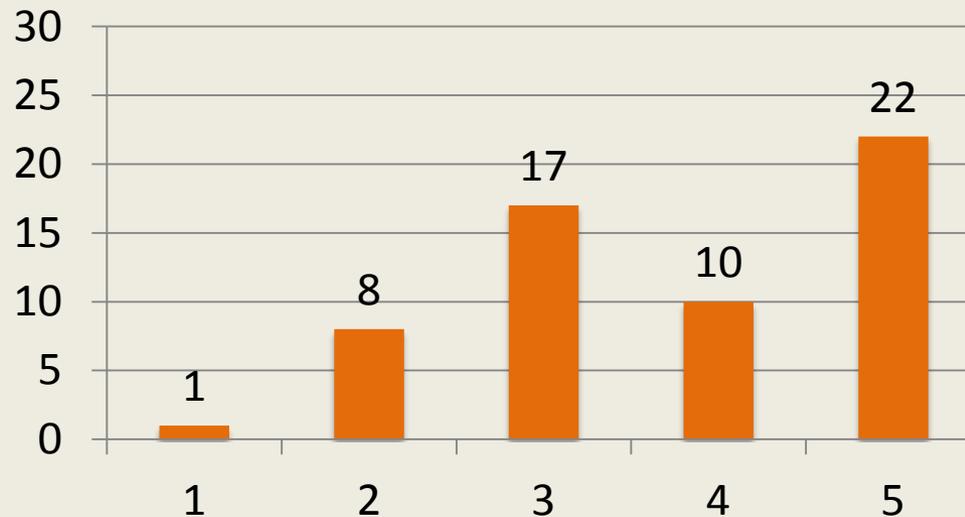


Closer look at SFI as an example

Sustainable Forestry Initiative (SFI) Never Heard of It 1 2 3 4 5 Very Familiar

How familiar are you with these certification programs?

Average Response = 3.5

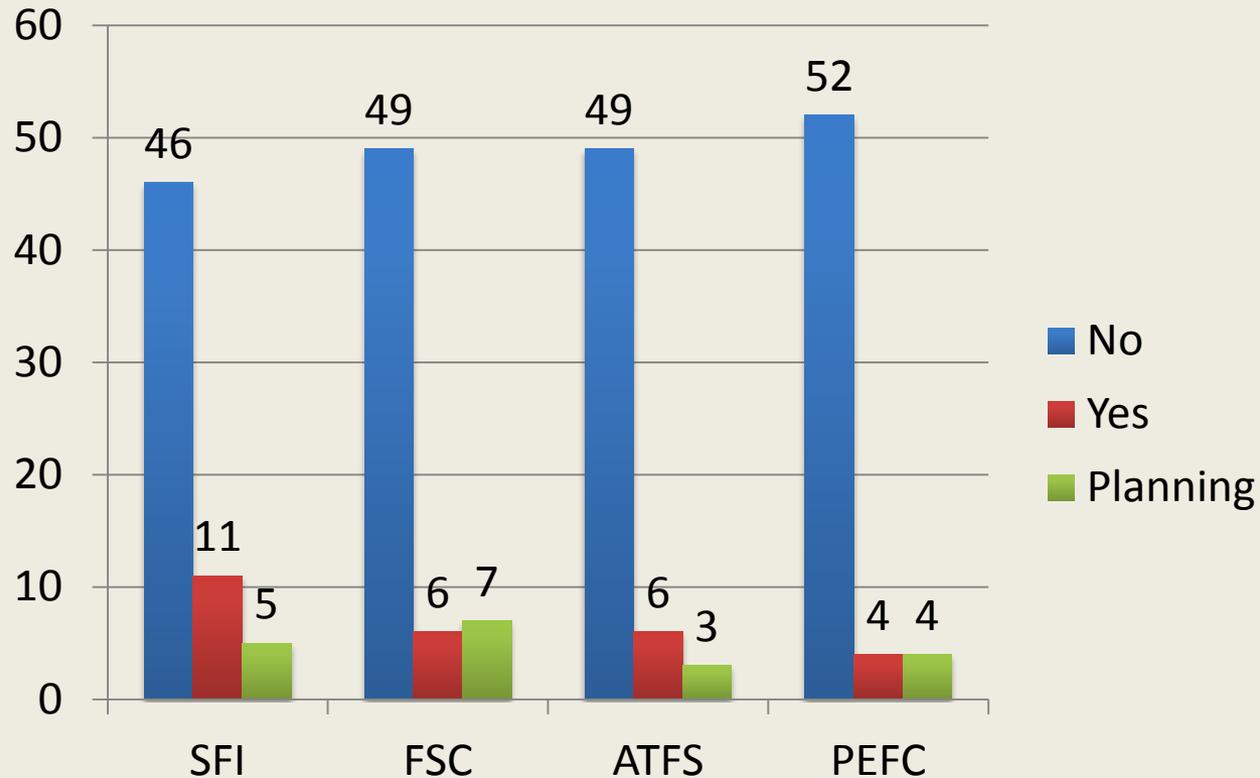


Please indicate if you are currently enrolled or plan to be enrolled by the certification programs below

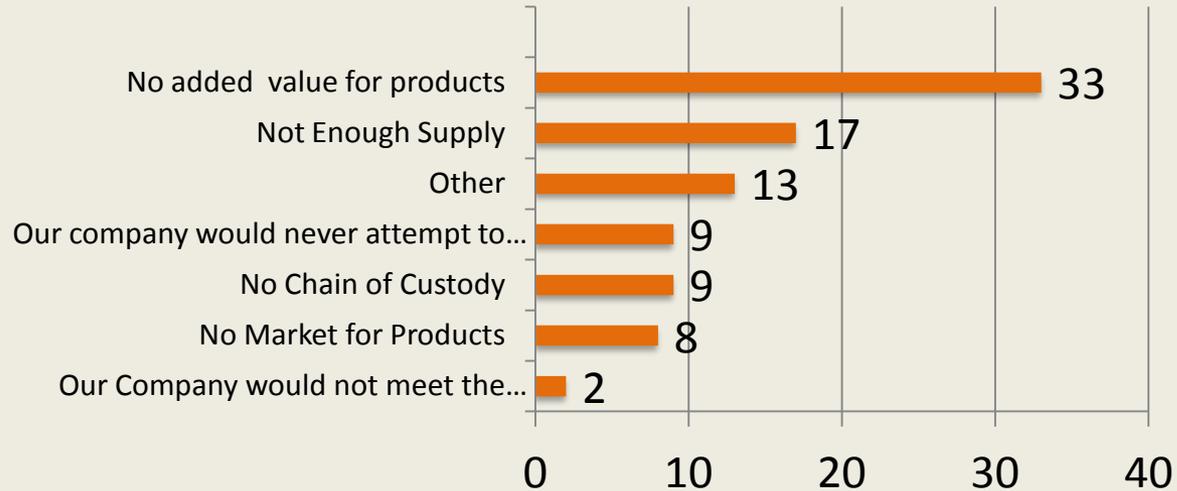
(Circle only ONE for each)

CERTIFICATION PROGRAM

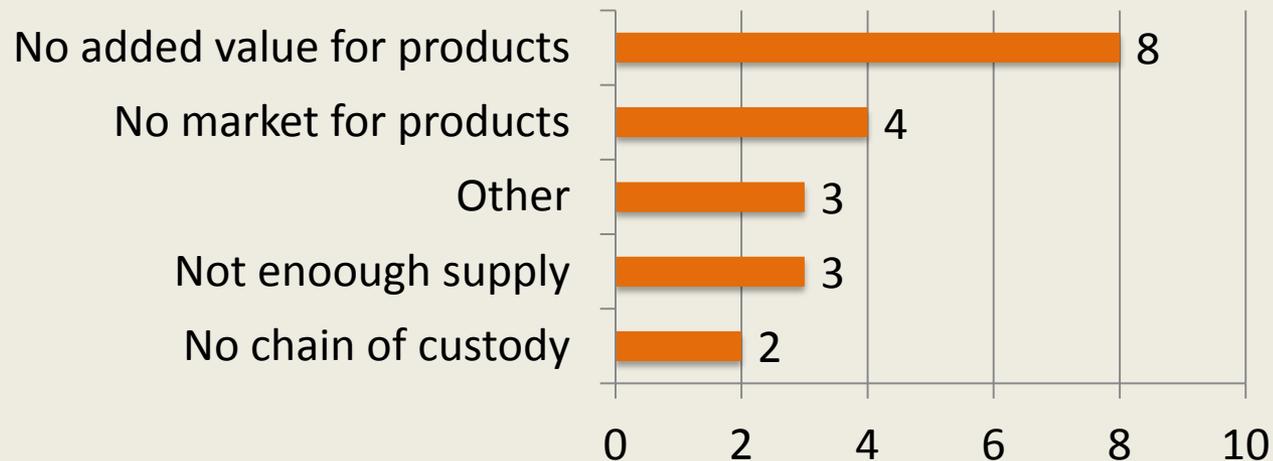
CERTIFICATION PROGRAM	No	Yes	Planning
Sustainable Forestry Initiative (SFI)	1	2	3
Forest Stewardship Council (FSC)	1	2	3
American Tree Farm System (ATFS)	1	2	3
Program For the Endorsement of Forest Certification (PEFC)	1	2	3



If your company IS NOT currently certified, what are some of the barriers?



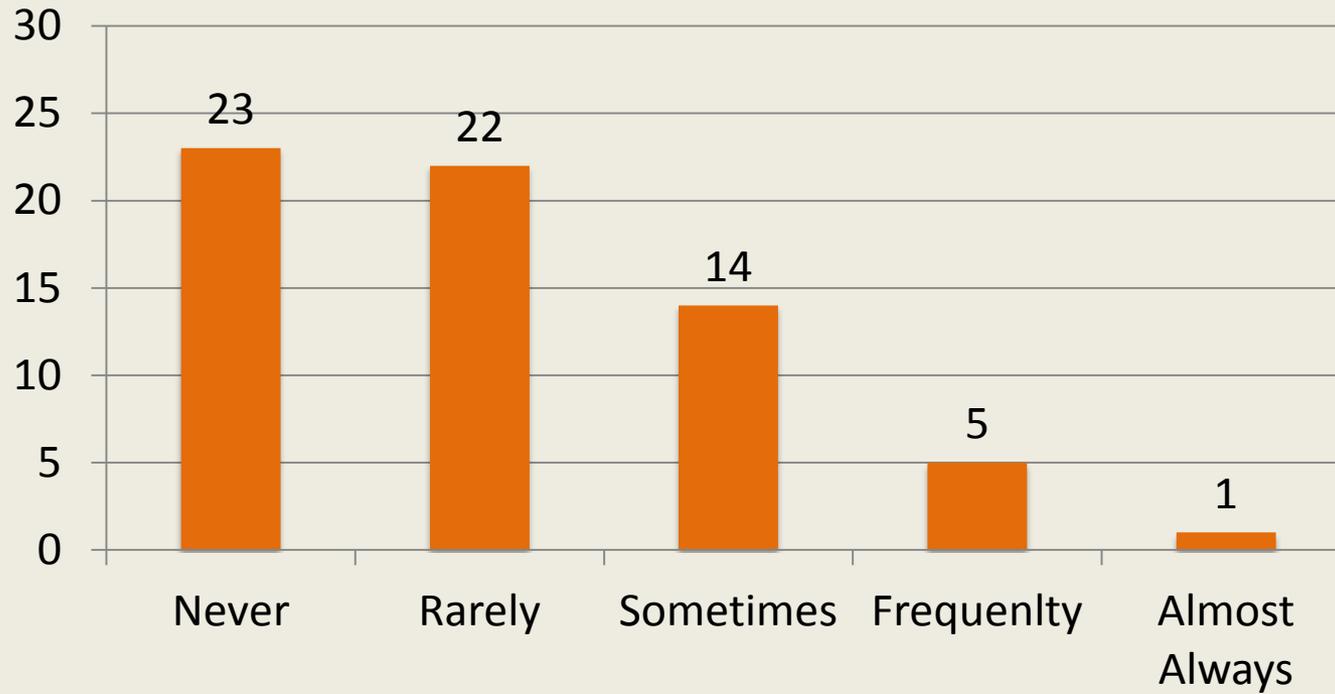
If your company IS currently certified, what are some of the barriers?



How frequently do your customers request certified products (e.g. FSC, SFI, etc.)?
Circle only one number

Frequency

Never Rarely Sometimes Frequently Almost Always
1 2 3 4 5

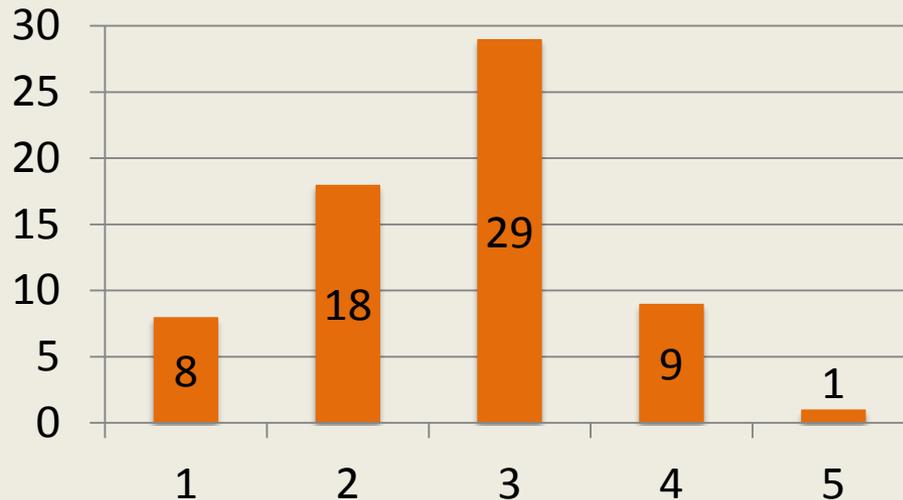


Please indicate your agreement with the following statements
(Circle only one number for each)

AGREEMENT: Strongly Disagree Disagree Neither Agree nor Disagree Agree Strongly Agree
1 **2** **3** **4** **5**

Purchasing certified wood is a good idea for wood product manufacturers

Average Response = 2.65



Summary

- The majority of forest products companies have some familiarity with the leading certification agencies and have no issues with trust or likes/dislikes
 - Definitely room for improved understanding and knowledge
- The majority of solid wood producers feel that there are few benefits to certification programs
 - No financial benefit (added value, market share, competitive edge, customer requests)
 - No environmental benefit
 - Will not help improve image
 - Only beneficial for export markets
- The paper industry and veneer industry held the opinion that there are benefits to certification programs
- The Future?
 - Uncertain about certification

Co-orientation and Summary

Co-orientation Measures

Shared items (*Economics, Image, Good Idea, Understanding*)

Likert-type measurements – scale 1 to 5

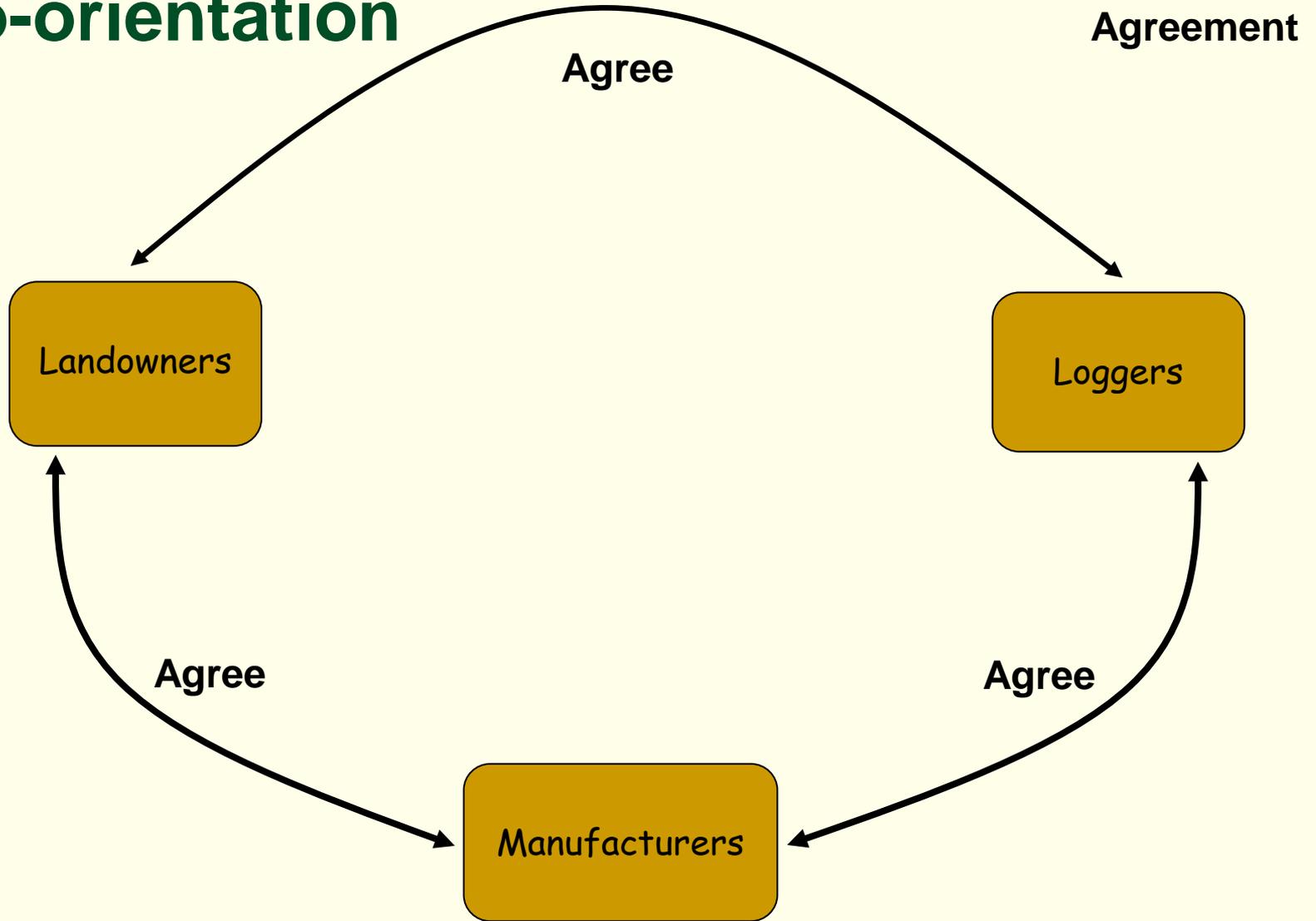
Co-orientation

Landowners

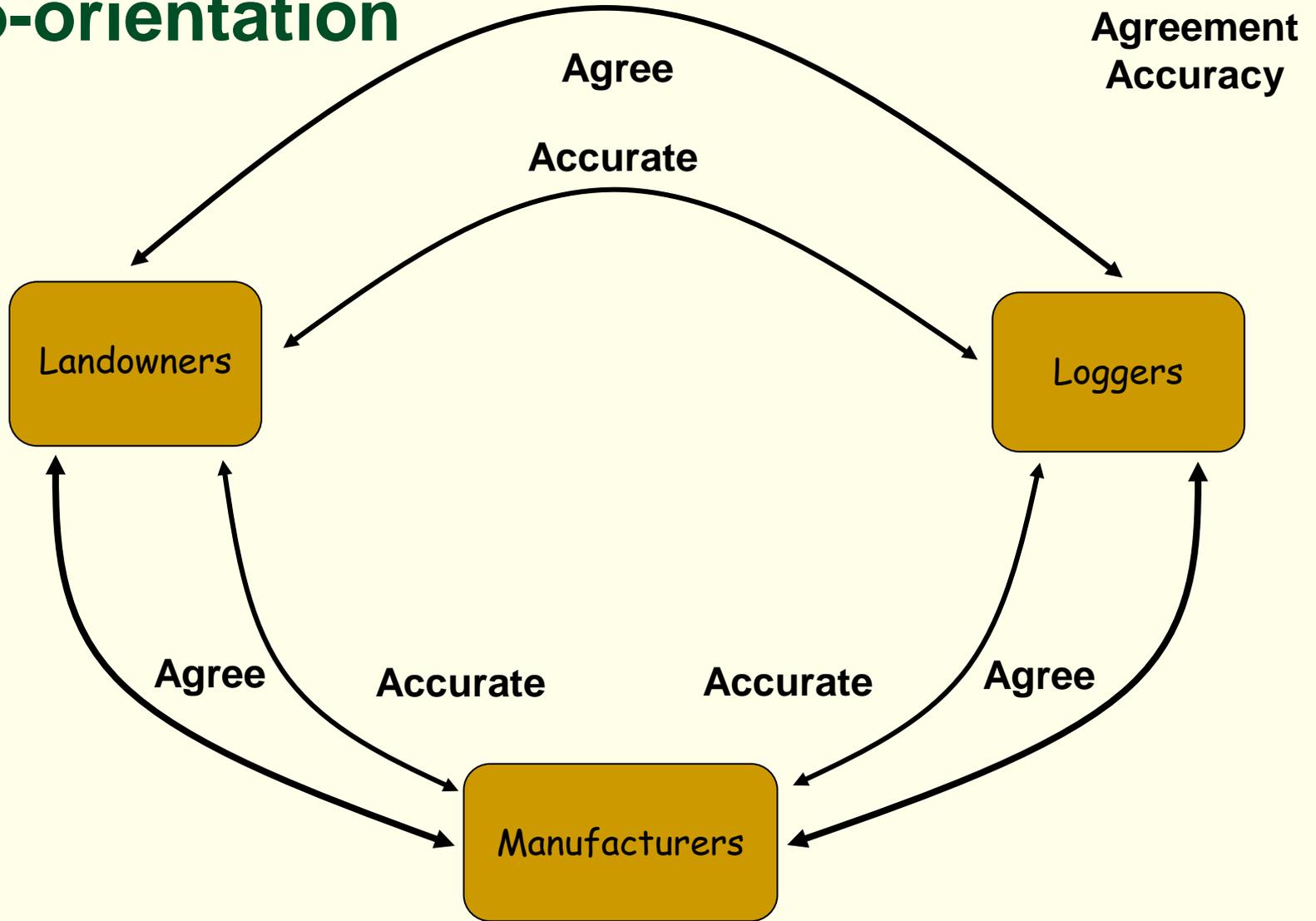
Loggers

Manufacturers

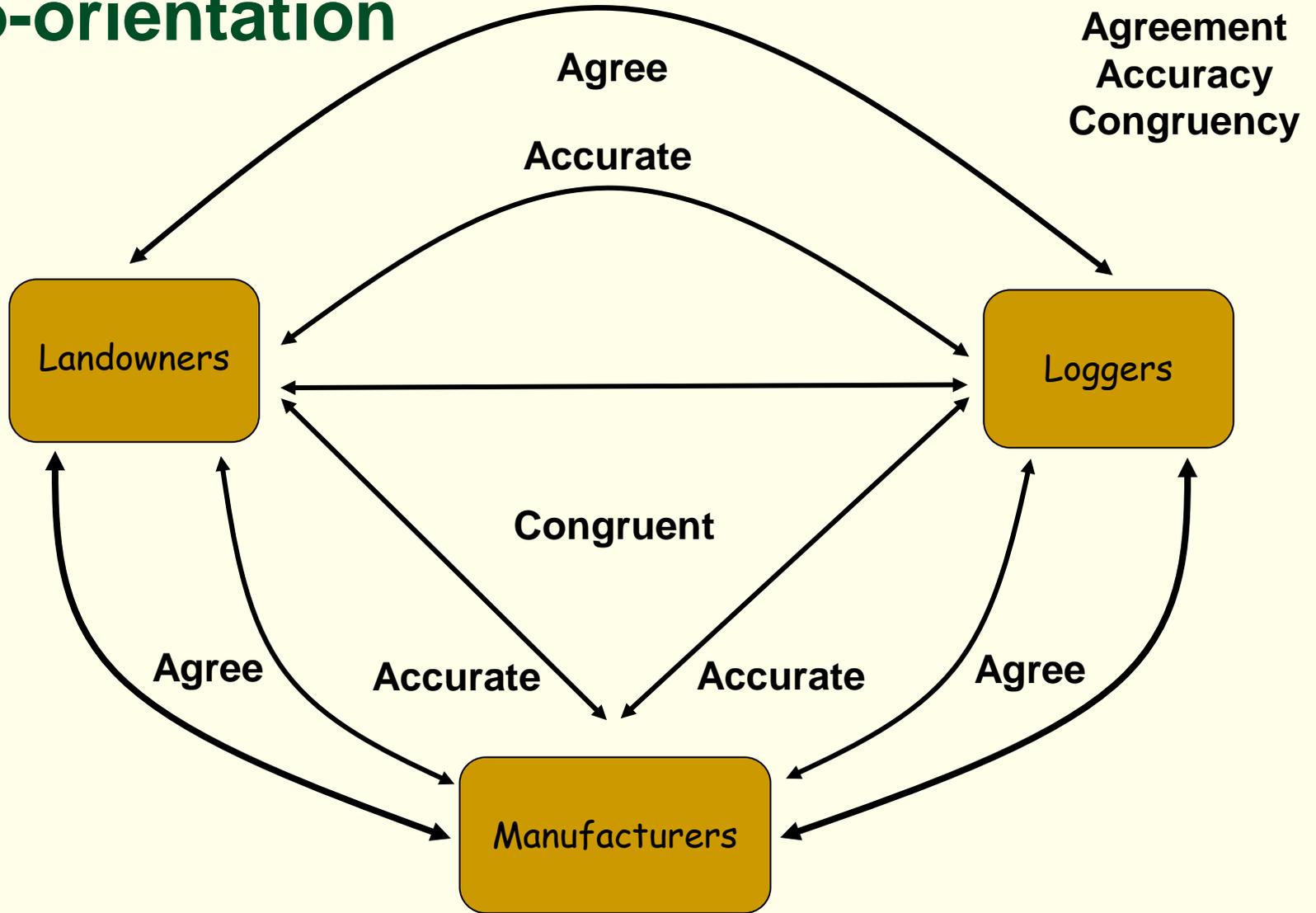
Co-orientation



Co-orientation



Co-orientation



Survey and Analysis

Analysis

Non-parametric tests (Kruskal-Wallis, Mann-Whitney U, Friedman's Two-way)

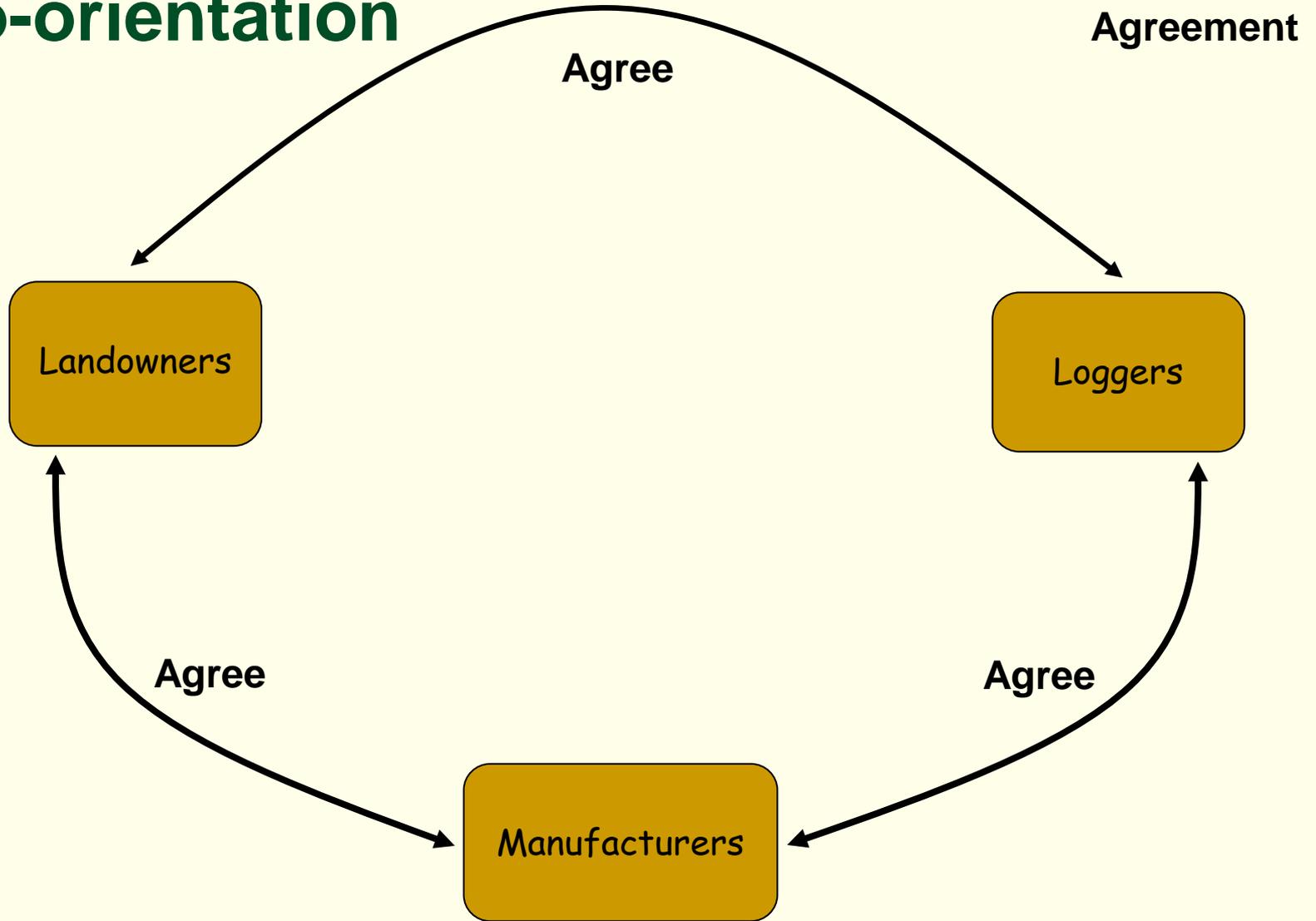
Alternative when conditions cannot be met

Substitutes ranks for values (lowest value receives a '1', and so on)

Test hypothesis that sample rank distributions are equal

Mean score are displayed to demonstrate central tendency

Co-orientation



Agreement

	Sample Average Rank of Respondent Type		
	Landowner	Logger	Manufacturer
Economics (n=713) (23.87*)	3.17	2.96	2.53
Image (n=713) (17.66*)	3.18	3.22	2.68
Good Idea (n=713) (26.65*)	3.2	3.17	2.5
Understanding (n=713) (71.49*)	2.58	3.24	2.94

Stakeholders did not agree on the potential for economic benefits

Agreement

	Sample Average Rank of Respondent Type		
	Landowner	Logger	Manufacturer
Economics (n=713) (23.87*)	3.17	2.96	2.53
Image (n=713) (17.66*)	3.18	3.22	2.68
Good Idea (n=713) (26.65*)	3.2	3.17	2.5
Understanding (n=713) (71.49*)	2.58	3.24	2.94

Loggers and Landowners agreed on image / beliefs, manufacturers did not

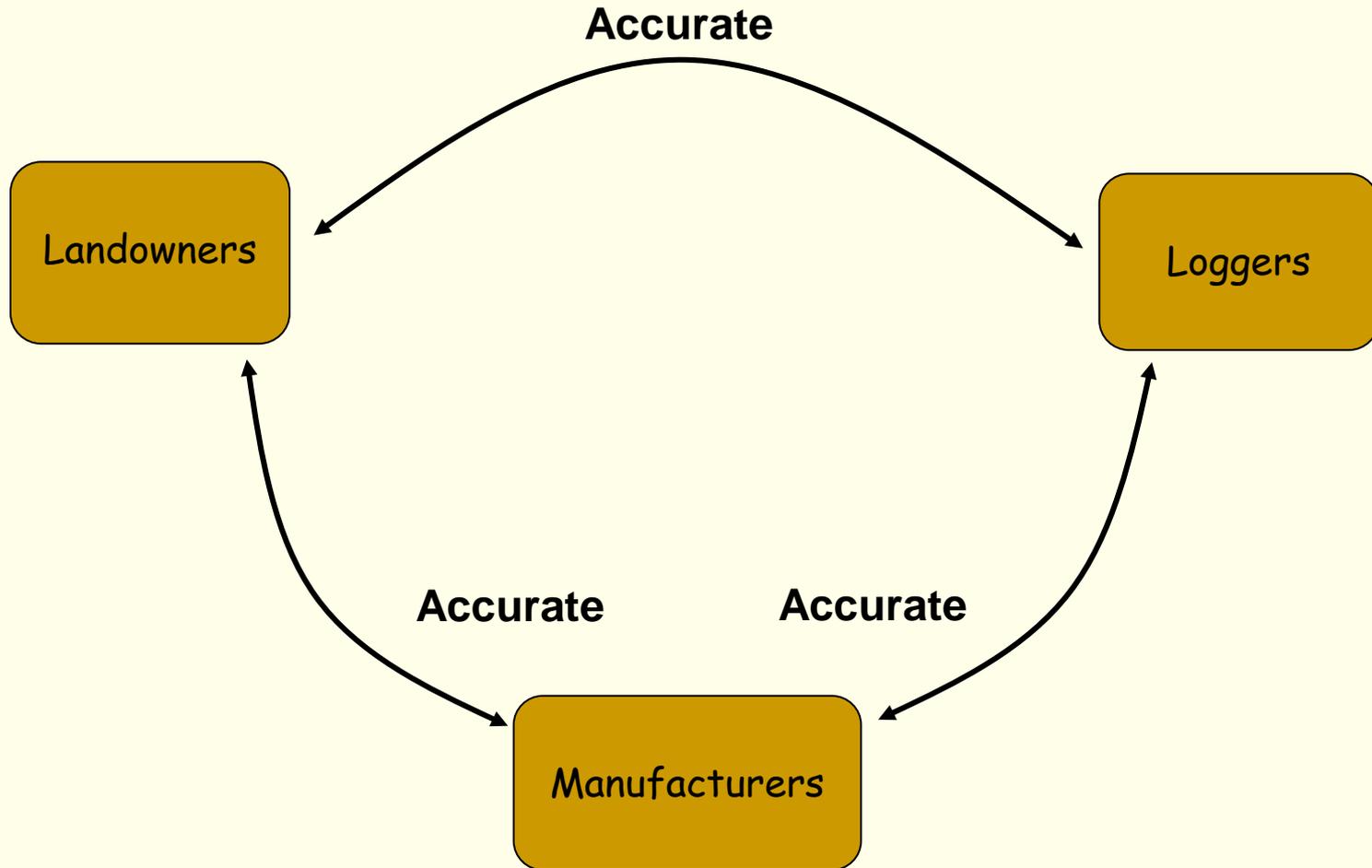
Agreement

	Sample Average Rank of Respondent Type		
	Landowner	Logger	Manufacturer
Economics (n=713) (23.87*)	3.17	2.96	2.53
Image (n=713) (17.66*)	3.18	3.22	2.68
Good Idea (n=713) (26.65*)	3.2	3.17	2.5
Understanding (n=713) (71.49*)	2.58	3.24	2.94

Loggers and Manufacturers agreed on understanding, landowners did not

Co-orientation

Accuracy



Landowner Accuracy

	Mean Rank of Respondent Type		
	<u>Landowner</u>	Logger	Manufacturer
Economics (n=701) (-1.54) (n=407) (-3.25*)	3.17 3.17	3.04	2.82
Image (n=694) (-.868) (n=405) (-.914)	3.18 3.18	3.02	3.06
Good Idea (n=713) (-1.74) (n=403) (-3.22*)	3.2 3.2	3.05	2.82
Understanding (n=713) (71.49*) (n=405) (-1.23)	2.58 2.58	2.71	2.42

Loggers accurately predicted landowner beliefs on economic benefits and whether it is a good idea, manufacturers did not

Landowner Accuracy

	Mean Rank of Respondent Type		
	<u>Landowner</u>	Logger	Manufacturer
Economics (n=701) (-1.54) (n=407) (-3.25*)	3.17 3.17	3.04	2.82
Image (n=694) (-.868) (n=405) (-.914)	3.18 3.18	3.02	3.06
Good Idea (n=713) (-1.74) (n=403) (-3.22*)	3.2 3.2	3.05	2.82
Understanding (n=713) (1.49*) (n=405) (-1.23)	2.58 2.58	2.71	2.42

Loggers predicted that landowners would believe they understand certification systems a little better

Logger Accuracy

	Mean Rank of Respondent Type		
	Landowner	<u>Logger</u>	Manufacturer
Economics (n=694) (0.31) (n=423) (-3.50*)	3.03	2.96 2.96	2.24
Image (n=693) (2.52*) (n=405) (-.914*)	3.15	3.22 3.22	2.85
Good Idea (n=699) (2.49*) (n=426) (-6.18*)	3.0	3.17 3.17	2.33
Understanding (n=696) (2.82*) (n=426) (-6.26*)	3.14	3.24 3.24	2.48

Neither landowners nor manufacturers did a good job predicting logger beliefs

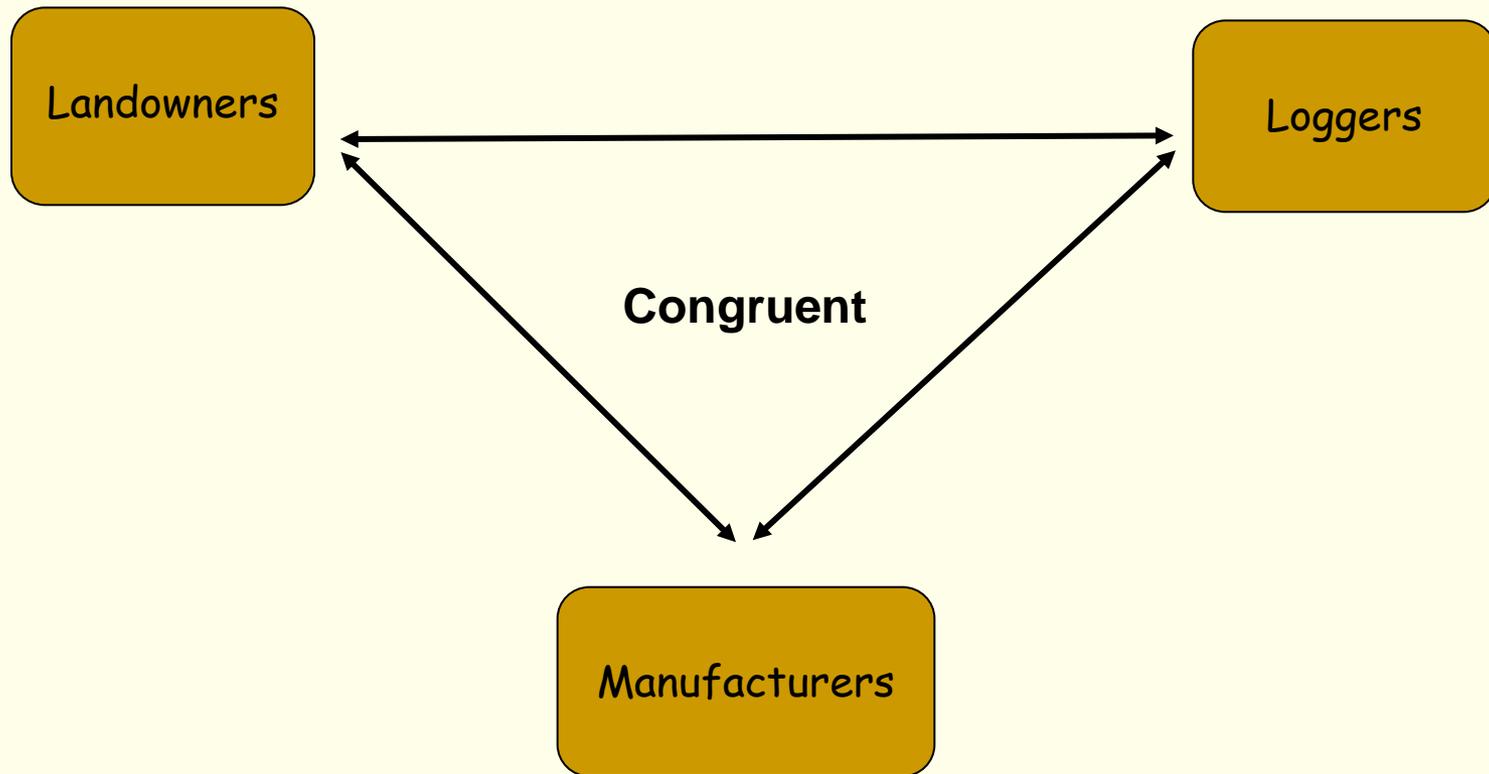
Manufacturer Accuracy

	Mean Rank of Respondent Type		
	Landowner	Logger	<u>Manufacturer</u>
Economics (n=447) (-2.89*) (n=434) (-4.21*)	3.14	3.06	2.53 2.53
Image (n=447) (2.70*) (n=434) (-4.61*)	3.28	3.32	2.68 2.68
Good Idea (n=447) (-3.21*) (n=434) (-4.89*)	3.17	3.21	2.5 2.5
Understanding (n=447) (-0.12) (n=434) (-1.05)	3.2	3.02	2.94 2.94

Landowners and loggers correctly predicted understanding among manufacturers, overestimated other variables

Co-orientation

Congruency



Landowner Congruency

	Mean Rank of Respondent Type		
	<u>Landowner</u>	Logger	Manufacturer
Economics (n=329) (9.75*)	3.17	3.03	3.14
Image (n=325) (11.96*)	3.18	3.15	3.28
Good Idea (n=325) (12.95*)	3.2	3.0	3.17
Understanding (n=320) (129.73*)	2.58	3.14	3.2

Landowners believed that loggers and manufacturers understand forest certification much better than they do

Landowner Congruency

	Mean Rank of Respondent Type		
	<u>Landowner</u>	Logger	Manufacturer
Economics (n=329) (9.75*)	3.17	3.03	3.14
Image (n=325) (11.96*)	3.18	3.15	3.28
Good Idea (n=325) (12.95*)	3.2	3.0	3.17
Understanding (n=320) (129.73*)	2.58	3.14	3.2

Landowners believed that loggers have less positive beliefs than they do regarding potential economic benefits and whether it is a good idea

Landowner Congruency

	Mean Rank of Respondent Type		
	<u>Landowner</u>	Logger	Manufacturer
Economics (n=329) (9.75*)	3.17	3.03	3.14
Image (n=325) (11.96*)	3.18	3.15	3.28
Good Idea (n=325) (12.95*)	3.2	3.0	3.17
Understanding (n=320) (129.73*)	2.58	3.14	3.2

Landowners believed that manufacturers feel more positively than they do about benefits to their image

Logger Congruency

	Mean Rank of Respondent Type		
	Landowner	<u>Logger</u>	Manufacturer
Economics (n=330) (7.35*)	3.04	2.96	3.06
Image (n=332) (46.72*)	3.02	3.22	3.32
Good Idea (n=334) (7.10*)	3.05	3.16	3.21
Understanding (n=331) (56.93*)	2.71	3.24	3.02

Loggers believed that manufacturers and landowners do not share their level of understanding, with landowners notably lower

Logger Congruency

	Mean Rank of Respondent Type		
	Landowner	<u>Logger</u>	Manufacturer
Economics (n=330) (7.35*)	3.04	2.96	3.06
Image (n=332) (46.72*)	3.02	3.22	3.32
Good Idea (n=334) (7.10*)	3.05	3.16	3.21
Understanding (n=331) (56.93*)	2.71	3.24	3.02

Loggers believed that manufacturers have more positive beliefs about image benefits than they do, and landowners less

Logger Congruency

	Mean Rank of Respondent Type		
	Landowner	<u>Logger</u>	Manufacturer
Economics (n=330) (7.35*)	3.04	2.96	3.06
Image (n=332) (46.72*)	3.02	3.22	3.32
Good Idea (n=334) (7.10*)	3.05	3.16	3.21
Understanding (n=331) (56.93*)	2.71	3.24	3.02

Loggers believed that landowners do not share their positive beliefs about whether it is a good idea, and that manufacturers have a more positive belief than they do about economic benefits

Manufacturer Congruency

	Mean Rank of Respondent Type		
	Landowner	Logger	<u>Manufacturer</u>
Economics (n=67) (9.83*)	2.82	2.24	2.53
Image (n=67) (8.00*)	3.06	2.85	2.68
Good Idea (n=67) (18.23*)	2.82	2.33	2.5
Understanding (n=67) (9.30*)	2.42	2.48	2.94

Manufacturers believed they have higher understanding than landowners and loggers

Manufacturer Congruency

	Mean Rank of Respondent Type		
	Landowner	Logger	<u>Manufacturer</u>
Economics (n=67) (9.83*)	2.82	2.24	2.53
Image (n=67) (8.00*)	3.06	2.85	2.68
Good Idea (n=67) (18.23*)	2.82	2.33	2.5
Understanding (n=67) (9.30*)	2.42	2.48	2.94

Manufacturers believed landowner beliefs outside of their understanding would be significantly higher than those of their own and among loggers

Trends and Next Steps

Disagreement and misperception, but also alignment

Understanding versus beliefs in benefits

Manufacturers high understanding but not as positive in their beliefs

Balancing consumer versus business markets

Positive outlook among loggers (business opportunity?)

Extended to landowners and manufacturers

Landowners also have a positive outlook, but limited understanding

Positive assessments of manufacturers, limited for loggers

Program development

Focus on multi-stakeholder programs using targeted approach

Outreach Opportunities

Fact sheet or Tri-fold Brochure

Numbered Extension publication

Logger, landowners, industry, general public

What is certification? Who are the players? How does/can certification affect Virginia's forests? How can you learn more?

Distribute to SHARP Logger and VFLEP participants

Distribute to home improvement centers?



Outreach Opportunities

4 Symposiums

One in each Extension District

Speakers: Reps. From each of the major certification programs

Participants: loggers, landowners, forest products businesses, natural resource professionals, local leaders, general public



Outreach Opportunities

Targeted education programs

Work with Stewardship landowners

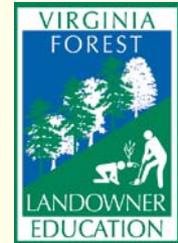
Already have management plans

Converges with ATFS goals

Work with current Tree Farmers

Increase value/understanding of program

Increase retention



Outreach Opportunities

On-line Training

LEAF On-line learning module
Certifying Your Woods (www.valeaf.org)

Publications

Journal of Extension
Tree Farmer Magazine
Virginia Forests Magazine
Forest Products Journal
Industry Association Magazines



Questions

