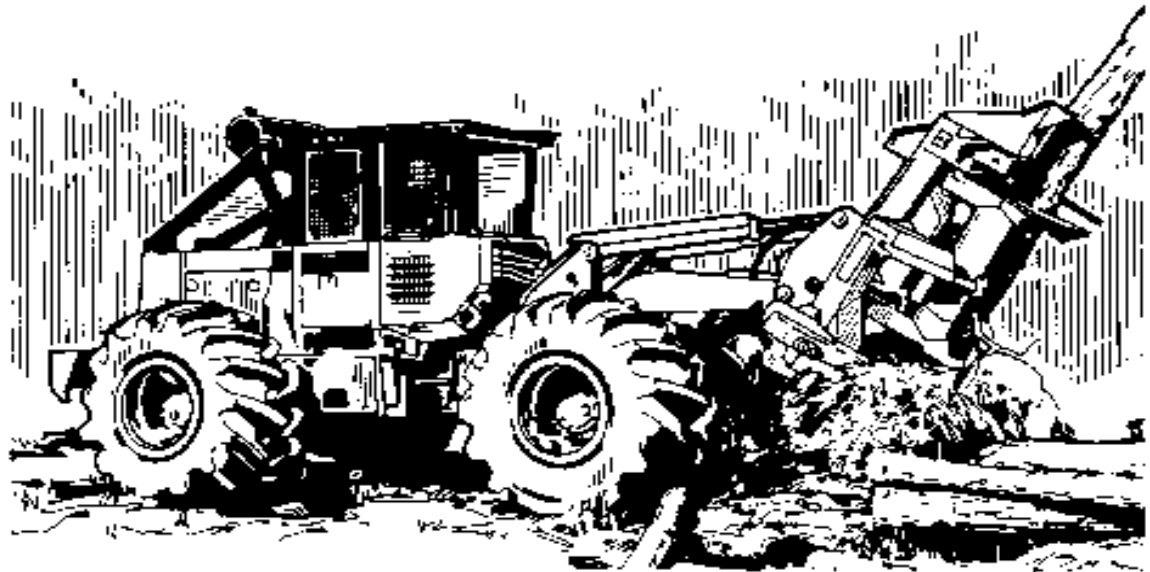


APPENDIX A

Logger's Study Questionnaire

Study of Technology Transfer in the Logging Industry



Center for Forest Products Marketing & Management
Department of Wood Science and Forest Products
Virginia Polytechnic Institute and State University
Blacksburg, VA 24061-0503

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Logging today is a high-technology operation. Most disturbances to a forest can be minimized by careful logging practices. The forest-based industry has continuously improved the technology of forestry practices throughout the 20th Century. But developers of technology have a difficult time reaching loggers and other forest practitioners. Only by identifying the most effective communication channel(s) can we ensure that technology reaches the right users at the right time. This questionnaire is designed to gather data on how loggers receive information on new technology.

1. What type of timber does your operation primarily harvest?

- Hardwood
- Softwood
- Both

2. Where is your logging operation located? Please indicate the state(s).

3. What geographical region do you usually operate in?

- Mountain
- Piedmont
- Coastal plain
- Other (Please specify): _____

4. Please indicate which of the following technology you currently use in your logging operation(s).(Please check all that apply)

- Hand held data collector
- Mechanical delimiters
- Personal computer
- On board scale
- Forwarder
- Wireless communication (For example, cellular phone or CB radio)
- Portable timber bridges
- On site processors
- None of the above

5. In your opinion, how important are the following sources in receiving new information regarding logging operation(s)?

	Below Average Importance		Average Importance			Above Average Importance	
	1	2	3	4	5	6	7
Advertisements in trade magazines	1	2	3	4	5	6	7
Trade shows/conventions	1	2	3	4	5	6	7
Personal contact with other loggers	1	2	3	4	5	6	7
Personal contact with industry foresters	1	2	3	4	5	6	7
Logger education or training programs	1	2	3	4	5	6	7
Extension publications or newsletters	1	2	3	4	5	6	7
Extension personnel	1	2	3	4	5	6	7
State or regional foresters	1	2	3	4	5	6	7
Trade magazine articles	1	2	3	4	5	6	7
USDA, Wood In Transportation Program	1	2	3	4	5	6	7
Sale people from companies producing and promoting new technology	1	2	3	4	5	6	7

6. In your opinion, how important are the following materials in the choice of a portable bridge in logging operation?

	Below Average Importance		Average Importance			Above Average Importance	
	1	2	3	4	5	6	7
Steel	1	2	3	4	5	6	7
Timber	1	2	3	4	5	6	7
Concrete	1	2	3	4	5	6	7
Aluminum	1	2	3	4	5	6	7

7. In each of the following pairs of individuals or organizations, which ones would be most important to you when you receive new information on products or technology regarding logging operation(s).

(Please indicate your level of preference for the more important factor by selecting a value from that factor's scale.)

For example, John is planning to buy a new truck for his logging operation. Two of the factors he is considering in his decision are the *price* and *make* of the different trucks. If he decided that the *price* of a truck was **very strongly** more important than the *make* of a truck, he would indicate his preference in the following manner:

1=Equal 3=Moderate 5=Strong 7=Very Strong 9=Extreme

This factor is more important than the opposite one

The two are equally important

This factor is more important than the opposite one



<i>Make</i>	9	8	7	6	5	4	3	2	1	2	3	4	5	6	7	8	9	<i>Price</i>
-------------	---	---	---	---	---	---	---	---	---	---	---	---	---	---	----------	---	---	--------------

If John picks the scale of 7 in the right hand side (as shown above) as his preference. It indicates that, in terms of the decision of buying a new truck, the *price* of the new truck is **very strongly** more important than the *make* of the truck for John.

<i>Make</i>	9	8	7	6	5	4	3	2	1	2	3	4	5	6	7	8	9	<i>Price</i>
-------------	---	---	---	---	---	---	----------	---	---	---	---	---	---	---	---	---	---	--------------

1=Equal 3=Moderate 5=Strong 7=Very Strong 9=Extreme

If John picks the scale of 3 in the left hand side (as shown above) as his preference. It indicates that, in terms of the decision of buying a new truck, the *make* of the new truck is **moderate** important than the *price* of the truck for John.

The following questions ask you to make comparisons among six different factors related to information flow. **Please use the above example when answering the following questions on next page.**

Abbreviations

Extension = Extension programs or personnel
State agency = State forestry agency
WIT = Wood in Transportation Program, USDA
Industry = Industry forester
Companies = Companies producing and promoting new technology such as portable timber bridge
Trade assoc. = Forestry or forest industry trade associations

1=Equal 3=Moderate 5=Strong 7=Very Strong 9=Extreme

This factor is more important than the opposite one	↓	The two are equally important	↓	This factor is more important than the opposite one	↓
Extension	9 8 7 6 5 4 3 2	1	2 3 4 5 6 7 8 9	State agency	
Extension	9 8 7 6 5 4 3 2	1	2 3 4 5 6 7 8 9	WIT	
Extension	9 8 7 6 5 4 3 2	1	2 3 4 5 6 7 8 9	Industry	
Extension	9 8 7 6 5 4 3 2	1	2 3 4 5 6 7 8 9	Companies	
Extension	9 8 7 6 5 4 3 2	1	2 3 4 5 6 7 8 9	Trade assoc.	
Extension	9 8 7 6 5 4 3 2	1	2 3 4 5 6 7 8 9	Trade shows	
State agency	9 8 7 6 5 4 3 2	1	2 3 4 5 6 7 8 9	WIT	
State agency	9 8 7 6 5 4 3 2	1	2 3 4 5 6 7 8 9	Industry	
State agency	9 8 7 6 5 4 3 2	1	2 3 4 5 6 7 8 9	Companies	
State agency	9 8 7 6 5 4 3 2	1	2 3 4 5 6 7 8 9	Trade assoc.	
State agency	9 8 7 6 5 4 3 2	1	2 3 4 5 6 7 8 9	Trade shows	
WIT	9 8 7 6 5 4 3 2	1	2 3 4 5 6 7 8 9	Industry	
WIT	9 8 7 6 5 4 3 2	1	2 3 4 5 6 7 8 9	Companies	
WIT	9 8 7 6 5 4 3 2	1	2 3 4 5 6 7 8 9	Trade assoc.	
WIT	9 8 7 6 5 4 3 2	1	2 3 4 5 6 7 8 9	Trade shows	
Industry	9 8 7 6 5 4 3 2	1	2 3 4 5 6 7 8 9	Companies	
Industry	9 8 7 6 5 4 3 2	1	2 3 4 5 6 7 8 9	Trade assoc.	
Industry	9 8 7 6 5 4 3 2	1	2 3 4 5 6 7 8 9	Trade shows	
Companies	9 8 7 6 5 4 3 2	1	2 3 4 5 6 7 8 9	Trade assoc.	
Companies	9 8 7 6 5 4 3 2	1	2 3 4 5 6 7 8 9	Trade shows	
Trade assoc.	9 8 7 6 5 4 3 2	1	2 3 4 5 6 7 8 9	Trade shows	

8. Do you currently utilize portable timber bridge(s) in your operation?

- Yes **(Please continue)**
- No **(Please go to question 10)**

9a. What type(s) of portable timber bridge(s) do you currently use?

- Engineered portable timber bridges
- Skidder bridges
- Road or deck mats
- Do-it-yourself bridges
- Other (Please specify): _____

9b. How important are the following factors in the choice of portable timber bridges?

	Below Average Importance		Average Importance			Above Average Importance	
Environmental considerations	1	2	3	4	5	6	7
Initial cost	1	2	3	4	5	6	7
Ease of operation	1	2	3	4	5	6	7
Promotional efforts	1	2	3	4	5	6	7
Availability of design information	1	2	3	4	5	6	7
Regulations	1	2	3	4	5	6	7
Other (Please specify): _____	1	2	3	4	5	6	7

9c. What is the price that you paid for your portable timber bridge?

- Under \$2,000
- Between \$2,001 to \$3,500
- Between \$3,501 to \$5,000
- Between \$5,001 to \$7,500
- Over \$7,501

9d. How did you learn to utilize portable timber bridge in your logging operation(s)?

Please go to question 11

10. In question 8 you answered that you currently do not utilize portable timber bridge(s) in your operation, how important are the following factors in the choice of **not** using portable timber bridge(s)?

	Below Average Importance		Average Importance			Above Average Importance	
Unsure the benefits	1	2	3	4	5	6	7
Initial cost	1	2	3	4	5	6	7
Lack of experiences	1	2	3	4	5	6	7
Promotional efforts	1	2	3	4	5	6	7
Availability of product information	1	2	3	4	5	6	7
Other (Please specify): _____	1	2	3	4	5	6	7

11. What is the best way to transfer information on new technology in the logging industry to loggers?

12. Is there anything that you would like to share concerning the use of new technology in logging operation(s) that we have not considered in this questionnaire?

The following questions refer to you as a professional. The results will be used only to group similar respondents. All responses are strictly confidential.

13. On average, how many professional meetings, trainings, or trade shows do you attend during a year?

_____ meetings / year

14. Please mark the box that most closely reflects your level of education

- High school
- Two-year college
- Four-year college
- Graduate school
- Other (Please specify): _____

15.

Name _____

Company _____

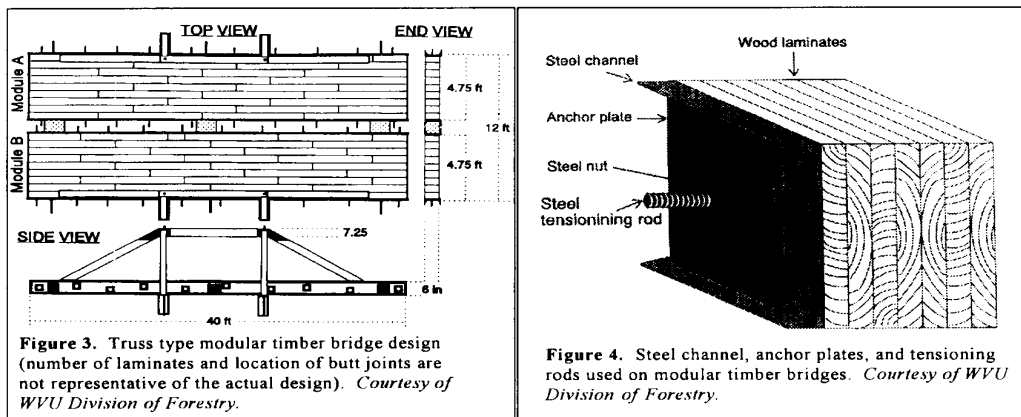
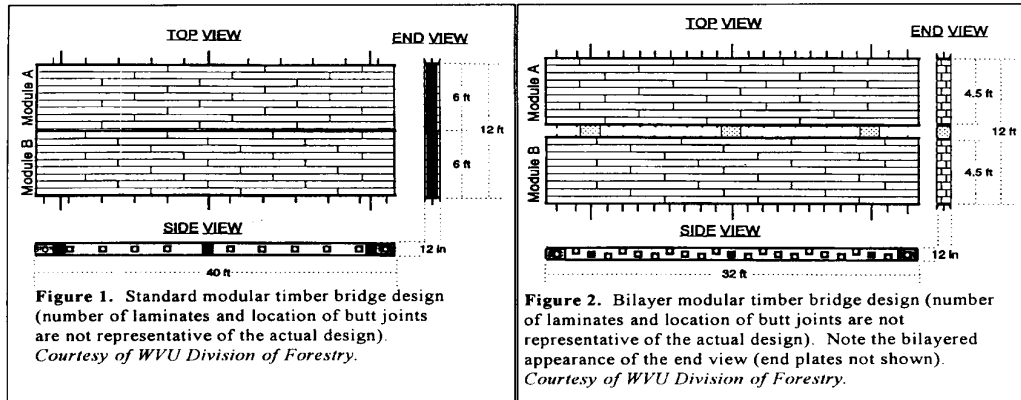
Address _____

City State & Zip _____

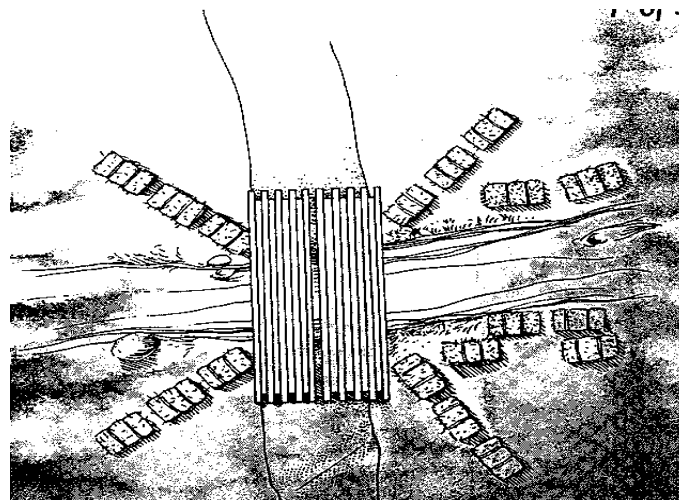
Day time telephone _____

Types of Portable Timber Bridges

1. Engineered portable timber bridge

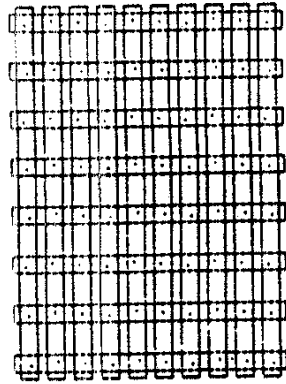


2. Skidder bridge



3. Road or deck mats

DECK MAT



ROAD MAT

