

Total Employment on Logging Operations Based on a Survey of Virginia Loggers

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Introduction

Virginia's logging operations serve a vital role in the sustainable management of Virginia's forests. Loggers are responsible for carrying out forest management plans and sustainably harvesting and transporting logs and fiber to mills for use as the raw material for forest products manufacturers. Virginia's forest sector has an overall impact of over \$21 billion (Rephann, 2017) and logging businesses are critical to supplying the materials needed for the forest industry and to allow forest landowners to receive economic benefit from their forests.

While the forest industry has some large corporations involved in producing forest products, most logging businesses are small family owned businesses. Although each business is relatively small, collectively there are a lot of logging businesses across Virginia and combined, they have a substantial impact on employment across Virginia's rural communities.

Have you ever wondered just how many total employees work for Virginia's logging businesses? We conducted a survey of all participants in Virginia's SHARP Logger Program (www.SHARPlogger.vt.edu) in 2019 and asked logging business owners how many full-time and part-time employees they had on their operations. This estimate of employment from logging business owners would include all employees whether they were directly employed in the woods, were at a shop or office, or in some other way employed by the logging business. This provides an estimate of overall employment by logging businesses and did not differentiate among job types.

Employees per Business on Logging Operations Across Virginia

Logging operations can vary substantially across Virginia (Barrett et al. 2017). As a result of differences in markets, forest types and other factors, logging operations in the Coastal Plain tend to be larger and often harvests are more focused on harvesting pine stands (Figure 1). The Piedmont is a transition area but in general logging operations in the Piedmont (Figure 2) are more like the Coastal Plain than the Mountains.



Figure 1. Logging employee trimming a load of pine pulpwood in the Coastal Plain of Virginia. (Scott Barrett, Virginia Cooperative Extension)



Figure 2. (Scott Barrett, Virginia Cooperative Extension)

Logging operations in the mountains are generally smaller and as a result the number of employees per business is lower as well. The overall average number of full-time employees was just under five per logging business (Figure 3). The highest number of employees per business was in the Coastal Plain (9.28) followed by the Piedmont (4.41) and Mountains (2.31). Logging businesses in the Mountains had more part-time employees (0.41 per business). However, across all regions, part-time employees only made up a relatively small proportion of all employees.

Estimating Total Employees on Logging Operations in Virginia

Our survey provided us with a good estimate of the average number of employees per business that responded. However not all logging businesses responded to our survey. By making some assumptions based on our response rate to the survey and assuming that it was representative of all logging operations in Virginia, we estimated the total number of logging employees in Virginia.

Based on our survey response rate (around 42%) and the total number of responses received from logging business owners (around 250) we estimated that this is representative of about 589 logging businesses across Virginia. Using our average number of employees per business and then extrapolating that based on our estimates of the number of businesses, we estimated the total number of logging employees across Virginia (Figure 4).



Figure 3. Average employees per logging business by region in Virginia.



Because individual logging operations are generally relatively small it can be easy to overlook the combined impact of a large number of logging businesses across Virginia. The combined estimate of logging employees across Virginia is just over 2900 full-time and over 200 part-time employees.

Logging businesses have a major impact in Virginia's rural economy. And keep in mind that this estimate only includes employees. It doesn't necessarily include the owners themselves who are often working in the woods along with their employees. This estimate also doesn't include the many contractors such as contract truck drivers who are supported by logging businesses. There is also a substantial impact on other local businesses that provide goods and services to loggers such as fuel, tires, equipment, insurance, and many other products as well. The combined economic impact from logging business activities including employment, purchasing timber from landowners, and delivering wood to mills makes a substantial impact on Virginia's rural economies and makes sustainable forest management possible for many landowners.



Figure 4. Estimated total number of logging company employees by region across Virginia.

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References

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