Features Harvesting

Logging by numbers

Trust your instincts, but verify with data

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No matter the size of your operation, disciplined and consistent data tracking coupled with use of an industry-specific database system to manage and report on that data is key to a stable future for your business. Photo: Hec Clouthier & Sons.

Loggers invest considerable sums in log harvesting and hauling equipment, but often allocate few to understanding the economics of their business. Yet failing to do so can be devastating for such a capital-intensive business. As an economist by training, I think a lot about these things.

It may seem that successful loggers instinctively know whether their operations are on track to meet production targets and turn a profit. The reality, however, is that these instincts are typically honed through the meticulous tracking of key statistics. These metrics will likely vary from one business to the next but will share some common themes that allow owners to course-correct and improve operational efficiency over time.

Taking the time to identify the statistics that are most critical for your particular logging operation is crucial because:

- They can help you understand the difference between production and productivity.
- They help you allocate your equipment and operators to maximize productivity.
- They help you and your team see patterns of inefficiency so that you can work together to correct the inefficiencies.

> Successful loggers also understand that using the right computerized tools to track and report upon their data is critical, just like it's critical to use the right equipment in the woods.

Recently, I asked two clients – SPF Forestry in Northern Alberta, a relatively new player as a stump-to-dump contractor for West Fraser, and Hec Clouthier & Sons, a long-established logging contractor in central Ontario with a 90-year history – to share their insights about the metrics they monitor.

Know how many hours It takes to cut a tree

"I'm a production guy, not an accountant. I focus on hours per meter of wood harvested and hours per stem cut," says Jeff Stoesz, one of the founders of SPF.

How does he monitor these figures?

He collects daily time sheets from his team, complete with detailed machine hours and estimated cubic meters and stem counts from his machines. He also systematically uses the Logger's Edge software to analyze this data block by block.

I asked if he could give examples where tracking these metrics helped him make course corrections during the year.

“Absolutely it has. In fact, I share the information daily with our workers. It helps motivate them to either keep doing what they are doing if they are on track, or look for ways to catch up if they are behind on the production,” said Jeff. “It also helps me counsel green employees who aren’t meeting their production targets in a confidential, data-driven way, which helps motivate them to do better. It’s amazing what showing people their numbers can do!”

He also noted that it triggers discussion about why they are falling behind. For example, West Fraser had them in some really rough terrain, and the skidders were not able to keep up with the processors. They could easily see from the numbers in the reports that they needed to add more skidders to the block to keep up. “We didn’t want a chaotic end to the season scrambling to get the wood out before the roads got too muddy. Having this information helped us achieve our targets in a more orderly and manageable way.”

Successful loggers trust their instincts, but they rely on the power of data to verify those instincts. Photos: SPF Forestry.

Know the $$$ behind each phase of operation

Shannon Clouthier, co-owner of Hec Clouthier & Sons, says they focus on costs per phase of operation. But it is not exactly a straightforward exercise. How do they do that?

To cost their equipment, they rely on tools within Logger's Edge to estimate a standard cost for each of their machine types based on information such as purchase price, utilization percentages for each machine, and fuel burn rates. They enter that information into the cost build-up model to estimate the machine hourly costs for bunching, loading, etc.

To cost their labor, they track each worker's hourly wage rate. They use the software to automatically marry up these hourly costs with machine and labor hours from time sheets in the system. By marrying up the inputs on a job with the output harvested, they can see their costs per phase on a block-by-block basis.

Once a year, they then compare the total costs in their accounting package to the costs across all the blocks for the season. Differences can result because they may not have accounted for certain overhead costs when doing their equipment costing or labor uplifts. The reconciliation forces the hand on analyzing where expenses may have notably changed from the prior year. Often, those variations relate to changes in repair costs or shop overhead costs that were not accounted for in the overhead assumptions used in the software.

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