LOGGING CHANCE APPS:
Free, Convenient and Built for the Forest Products Industry

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FREE, CONVENIENT AND BUILT FOR THE FOREST PRODUCTS INDUSTRY

BY STEVEN BICK

Many mobile and desktop applications have been developed for loggers, foresters and anyone who works in the forest products supply chain. I have been building forestry apps for years. A recent round of mobile app development inspired me to make all these apps available in a single place on the loggingchance.com website. This article will introduce and describe some of these apps.

Web-based apps have a number of advantages. They are accessible across different device types, so the iOS vs. Android operating systems or Chrome vs. Safari browser distinctions are not an issue. Updates to these apps happen seamlessly and require nothing of the users. Many of the apps described in this article have been optimized in separate versions for both mobile phones and desktop computers. You can even place an icon for them on your phone's home screen, just like you would with stand-alone applications. Sharing apps with friends and coworkers is as easy as sending a text or email.

The Northern Logger App

The Northern Logger App (www.northern-loggerapp.com) was developed with readers of *The Northern Logger* and NELA members in mind. With 30 separate tabs for references and calculators, this app includes something for everyone. Many forest products industry people tested this app and provided suggestions to shape its functions and contents.

One prominent feature in this app is a link to everything associated with the Northeastern Loggers' Association. You can read the latest articles, join the association or shop for books and merchandise with the links built into the app. Contact information for the association is included, along with links to their Facebook and Instagram accounts.

If you need to make measurements or comparisons of wood products, there are many options to choose from. Log and timber volumes are included, as are price comparisons. Wood weight references are included, and you can even estimate the tons per acre of woody biomass. Tree growth rates, basal area and stems per acre are among the forestry calculators included, as are spacing guidelines for planting trees.

Financial calculators in the app include a comparison of two loan alternatives (monthly payments and cumulative interest) and a retirement savings calculator. The retirement calculator allows you to figure out the annual savings requirements and time needed to meet a targeted financial goal. Start now to ensure you don't have to work forever.

Several water quality protection guidelines are built into the NL app. These are based on the *Vermont Water Quality Acceptable Management Practices for Logging Professionals* and are widely applicable for conditions in the Northeast. Among these are drainage spacing for skid trails, culvert sizing (both temporary and permanent), bridge spans and mulching and seeding requirements.
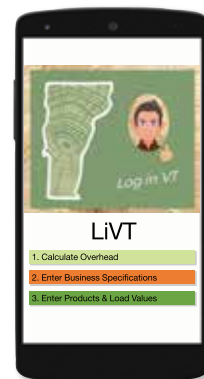
The gravel and roads calculator will be of particular interest to many users. If you know the dimensions of the road or fill area (length, width and depth) you can calculate the cubic yards, weight and number of truckloads of stone or gravel required.

Links for federal, state and non-governmental organizations are included in the NL app. The lists included are not exhaustive but provide a good starting point for contacts and further information.

The Northern Logger App was funded by grants from the US Forest Service State and Private Forestry and by the Farm Credit AgEnhancement program. This app would not have been possible without coordination among the Michigan Department of Natural Resources, the Vermont Department of Forests, Parks and Recreation and the Northeastern Loggers' Association.

Log-in-Vermont and iSawVT Apps

These two apps were created to put throughput accounting at the fingertips of people in the working landscape. Log-in-VT (LiVT) and iSawVT focus on relating financial calculations directly to operations in logging and portable sawmilling. While these apps were developed with Vermont

small business owners in mind, sound business practices aren't limited by state borders, so others will find them useful as well.

Throughput accounting is used to calculate the profit and return on investment (ROI) of individual jobs. If we accept the premise that the goal of a small business is to make money (both now and in the future), these two straightforward measurements indicate if progress is being made toward this goal. Business and operational decisions are evaluated based on their impact on these two financial measurements.

LiVT (pronounced Liv-it) can be accessed at www.loginvt.com. Users must supply information about equipment values and operational expenses. Browser storage is enabled, so if you add LiVT to your phone's home screen you will not have to re-enter background information each time. Once general information is entered, you provide details of specific jobs (production, job-specific costs and time) to calculate profit and ROI on a weekly, monthly or individual job basis. A "How to" tab provides detailed instructions for using the app.

The iSawVT app (accessed at www.iSawVT.com) works in a similar fashion to LiVT. Once background information about the business is entered, the details of specific production runs can be entered to calculate financial results. With results calculated, users can modify inputs (log cost, sawing time, etc.) to see how changes might result in improvements in financial performance.

The iSawVT app is new and has not had much testing. Suggestions and feedback are welcome.

Log-in-Vermont and iSawVT were created under a competitive grant from the Vermont Working Lands Enterprise Initiative. WLEI supports entrepreneurs in Vermont's working lands economy with technical and financial assistance to help growing businesses thrive. These two apps contribute to this effort.

Got BARK on It?

BARK (Bick's App for Resource Know-How) was built with foresters in mind. Many common field forestry calculations and references are possible in this app. These include old standbys like form class tree volumes, basal area and plot size and important newer measurements such as tree and forest stand carbon.

Many of the forestry calculators included in BARK are referenced from or inspired by Burl Ashley's classic *Reference Handbook for Foresters*. This great US Forest Service publication is available in PDF format and makes a great addition to any forester's mobile phone.

The tree and forest carbon estimators included in BARK are based on Jennifer Jenkins' (et al) *National Scale Biomass Estimators for United States Tree Species.* Species and diameter information allows users to reference tree carbon in metric tonnes. Species groups, basal area and average DBH allow users to estimate stand level forest carbon in metric tonnes per acre.

BARK was developed without any public funding and is freely available as a courtesy of Northeast Forests, LLC. You can find BARK at www.bicksapp.com.

Desktop Apps

Web-based desktop apps are accessed from any location with an internet connection and do not have to be installed on the computer. I developed a number of spreadsheet apps over the years, and they have now been redeployed as web apps. Old favorites like Timber Tools and PATH have been updated and posted on the Logging Chance website.

Timber Tools arose to serve the needs of people who attended NELA's popular Estimating Standing Timber Volumes workshop. For over 20 years this app could be purchased through the Forestry Suppliers catalog at a nominal cost. Now it is available for anyone to use freely.

Form class volume worksheets in Timber Tools allow users to enter a timber tally and summarize timber volumes in Doyle, Scribner and International Rules. Point sampling worksheets allow users to calculate timber volumes per acre from cruise data.

PATH version 3.0 is available exclusively as a web app. The original versions of PATH were developed with Forest Service and Northeastern States Research Cooperative funding. The latest update was made without outside funding but remains free for anyone to use.

PATH allows users to develop a template for their logging business costs and apply it to make projections for individual jobs and calculate financial results for jobs when they are completed. Straightforward measures of profit and return on investment are used to provide results that are easy to grasp and compare.

Other desktop apps in the Logging Chance family include Log Rule Tools and the Surewood Forest Products & Measurements Converter. Updated versions of old apps and brand-new offerings will be added to this collection moving forward.

Find the Apps that Serve You Best

Apps should serve as convenient time savers in our work by aggregating references and simplifying calculations. Intuitive web applications require little or no instruction and can provide you with answers quickly. Find and share the ones that serve you best.

Steve Bick is a forestry consultant and the Director of the Vermont Forest Business School. Much of his work is free and available at www.loggingchance.com.