

# How to Write a 300-Page Report in a Week: The Magic of Dictation Software

By James Komen, RCA #555

Dictation is not a new concept. Talk into a recording device, and a person or computer transcribes voice into text. With the recent prevalence of smartphones and other portable devices, however, dictation has become a much more viable timesaving tool for consultants.

The most obvious and important advantage to using dictation is its speed. Nearly all consultants speak faster than they can type. By using dictation, consultants can reduce the time it takes to write an initial report draft. But there's so much more to dictation than reducing writing time.

Smartphone owners all have the ability to record voice as an audio file. This allows the consultant to record observations in the field as they are made. There is a greater immediacy to the writing because the consultant is looking directly at the subject tree rather than a photo of it on a computer a few days after the site visit. There may be an opportunity to be more observant and thorough when using dictation versus when there is a temporal separation between observing and writing.

With dictation software, two general workflows can be used: web-based dictation and desktop-based dictation. Web-based dictation, such as SIRI on the iPhone, operates directly on a smartphone. It sends the dictated audio file to a remote server that analyzes it and sends back the transcribed text. For short messages, web-based software is

great because it seamlessly integrates with the mobile device and doesn't require a multi-step process of desktop transcription. The disadvantage is that this form of dictation software requires an internet connection, either through Wi-Fi or a cellular network.

Desktop-based dictation is more appropriate for longer audio files, usually more than a few minutes. There are a few extra steps to train the software, download an audio file, and transcribe



it. However, it's much faster and more accurate, and it doesn't require an internet connection in the field. One such dictation program is Dragon Naturally Speaking. From personal anecdotal experience, it is one of the best pieces of dictation software and has approximately 97–99% accuracy with field dictation.

Desktop-based dictation software offers several advantages. First, it transcribes

much faster. Whereas on a smart phone, the web-based software may transcribe at the same speed the user speaks, desktop-based software transcribes about 5–10 times faster. A 60-minute audio file will be transcribed in 8–10 minutes. After returning from the field, a consultant's reports can be entirely transcribed over the course of a short coffee break.

Another advantage is that desktop-based software is much more customizable than web-based. Users can train the software to recognize personal voice nuances more accurately than generic web-based software. Training the software creates a better accuracy rate. When accuracy is better, the user has to make corrections less frequently, saving time that adds up quickly on long reports. The training process involves reading a book excerpt provided by the program, usually for about 5–10 minutes. The training algorithm then compares the recorded audio to its known vocabulary to improve its accuracy when transcribing dictation.

Another useful tool offered by desktop-based dictation is vocabulary customization. Customization is especially useful when dealing with technical language. Dragon Naturally Speaking takes dictionary input, so users can provide whole lists of scientific plant names and technical jargon that it can analyze and match to the their voices. The process of inputting new vocabulary and formatting style is relatively painless. The user may simply select all previously writ-

ten reports and give the program about half an hour to run its algorithms on them. After running the training algorithms, the user has an opportunity to select or deselect from the list of possible terms to include in the program's vocabulary.

Both web-based and desktop-based workflows increase the number of hours consultants can be productive. Using a voice recording device, conversations with clients can be recorded and transcribed, allowing the consultant to deliver both an oral and written report at the same time. While driving, consultants can dictate thoughts on a hands-free device the instant that inspiration strikes rather than waiting until they return to the office. This reduces the likelihood of the consultant forgetting valuable ideas while away from a computer. Dictation turns driving time into productive time.

The easiest way to get started with desktop-based dictation is to find a voice recorder app that already comes standard on most phones. The iPhone comes with an app called Voice Memo. There are similar apps available for download on the android. The user can simply hit the record button and talk. The file can be sent to a computer via email or downloaded via a USB connection. After the dictation software is installed and trained to the user's writing style and vocabulary, transcribing the audio file is as simple as clicking and dragging the file to the program.

After the dictation software has transcribed the audio file,

the text can be copy and pasted into a word processing document to begin the first round of editing. This includes fixing incorrectly transcribed homonyms, adjusting punctuation, and moving around report sections. Usually the proofreading process takes a bit longer when working with dictation software, but the amount of extra time spent proofing is dwarfed by the amount of time saved by not having to manually type the report.

This last tip is a great timesaver: turning dictation into sortable spreadsheets. Some written tree reports include a plain English description of the subject tree, its defects, and any recommended care or risk mitigation. Without dictation, this level of detail would not be feasible on a 500+ tree inventory. However, using dictation software and consistent formatting, repeated text patterns can be transformed into sortable Excel spreadsheets. Creating such a spreadsheet would take most consultants or their assistants many grueling hours of data entry. But with a bit of word processing magic, the conversion may only take a few minutes.

After proofreading an inventory report, the first step is to ensure that it follows a specific repeated format. For example: Tree Number, Tree Common Name, Tree Latin Name, Description, Maintenance Hours, Priority, and then Recommended Service Date. Then, a Find-Replace function (Ctrl-H on the PC for Microsoft Word) can be utilized in the following sequence to format the table:

1. Replace the new paragraph character in the first line of each tree entry (^pTree ^#) with a temporary delimiter, such as @.

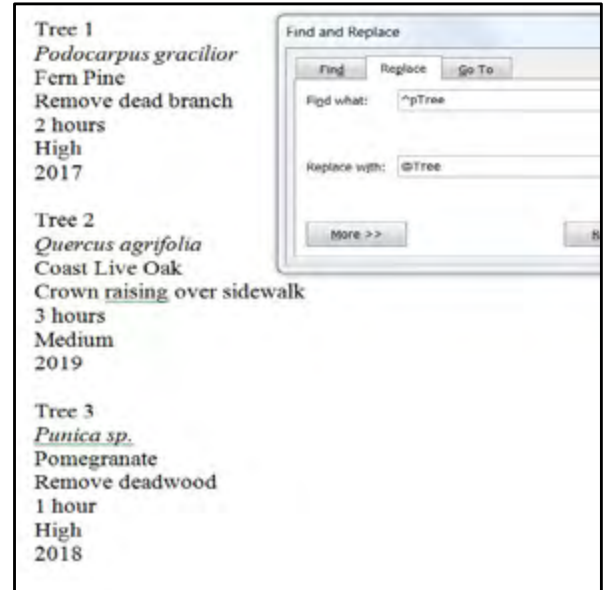


Figure 1: In Microsoft Word, make sure all of your dictation text follows a repeating pattern as shown. Press Ctrl-H to use Find and Replace. Then add a delimiter to first line of each entry (shown here as @).

2. Replace all of the remaining new paragraph characters (^p) with a different delimiter, such as #.

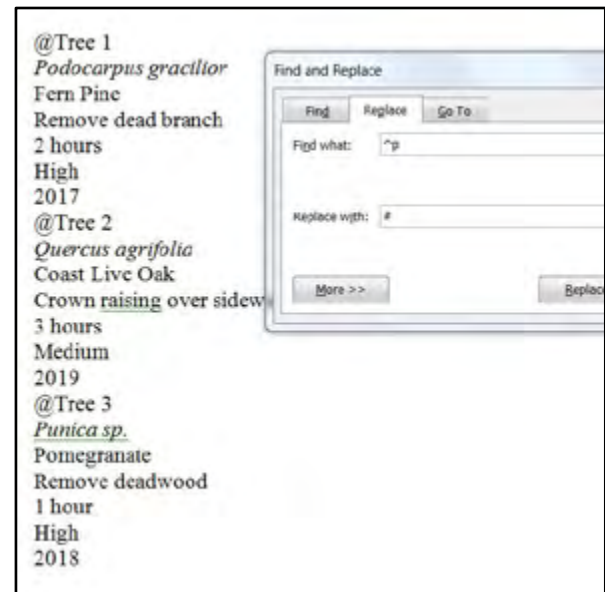


Figure 2: After marking the first line of each entry. Use a different delimiter (shown here as #) to replace all other new-line characters.

How to Write a 300-Page Report in a Week: The Magic of Dictation Software *continued*

3. Go back and replace the first delimiter @ with a new paragraph character (^p). Now each tree's information is condensed on a single line, with each attribute delimited by the character #.
4. Copy and paste this text into an Excel file, and each tree entry appears in its own cell.

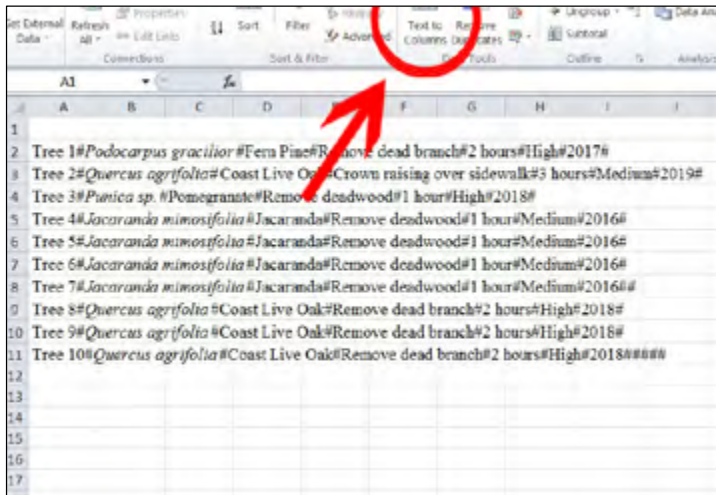


Figure 3: Paste the results in excel. Each tree entry should be on a separate line with data separated by a delimiter. Then click on Text to Columns.

5. Select this column of text and click Data > Text to Columns and then tell the program to parse out the data by the given delimiter #.

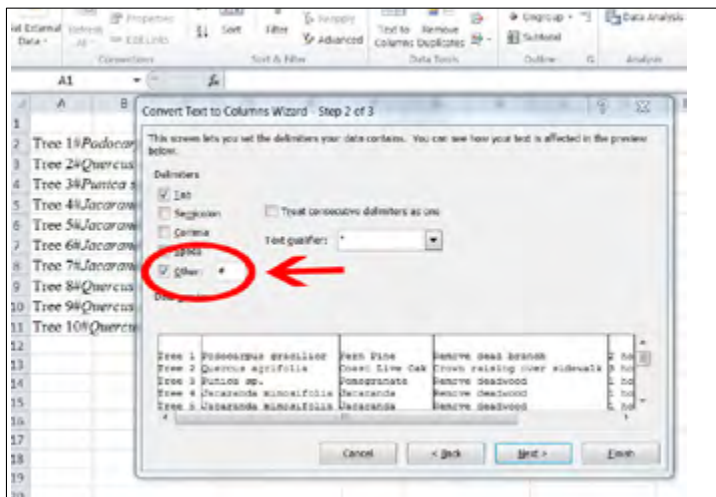


Figure 4: In the Text to Columns Wizard, enter the chosen delimiter (shown here as #). It will automatically separate the single column of text into multiple columns at each delimiter.

The result is an Excel file where each tree attribute is placed in a separate sortable column that can be analyzed. The data file can also be reformatted and uploaded to a tree inventory program. The same formatting trick can be used to drag and drop several hundred tree photos into an inventory, lining them up with their respective tree data in a few clicks.

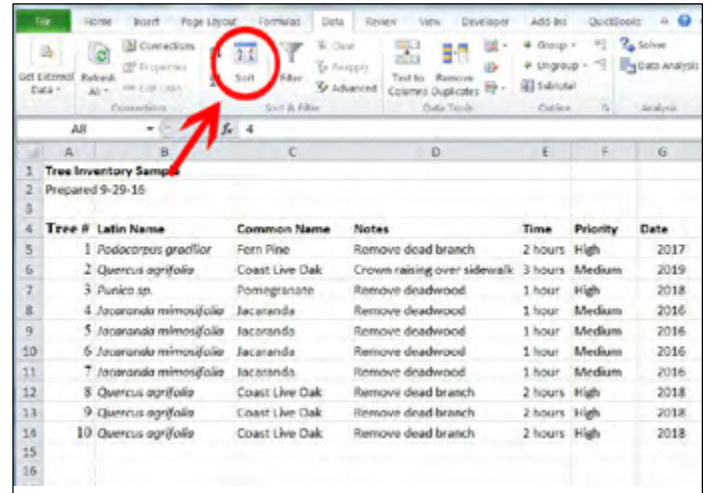


Figure 5: Format the spreadsheet to make it more visually appealing by adding a title, a date, and column labels. The spreadsheet is now sortable. Click on the Sort function to analyze the data.

Report writing used to take 45 minutes to an hour per page. Thanks to the magic of dictation, it is possible to prepare a 399 page report covering 559 trees in 56 hours (roughly 8.5 minutes per page). With the right tools, consultants can greatly improve speed, efficiency, and turnaround time for report writing. Take the time to try it out! 🌿

*James Komen, RCA #555, is a Board-Certified Master Arborist with a background in finance and accounting.*