

FOREST METRIX

User Manual

iOS, Android, Web · app version 4.0

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Getting started

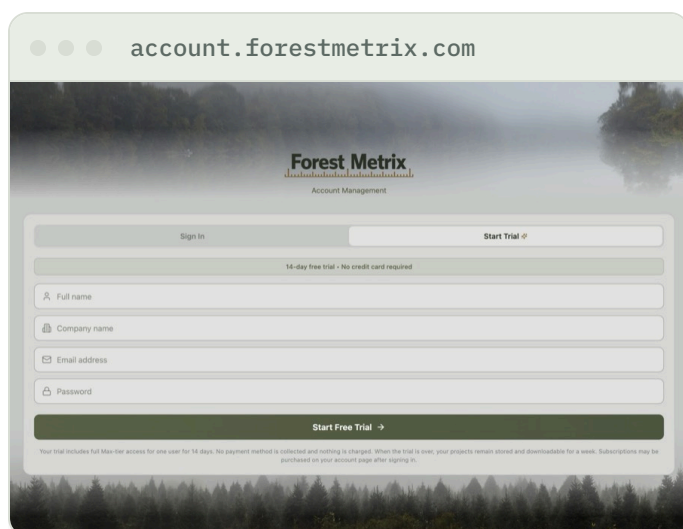
Sign in, build your first template with the Setup Wizard, and learn your way around the Projects screen and Project Home. By the end of this chapter you will have created a project and understand the nuts and bolts.

1.1 Set up your account

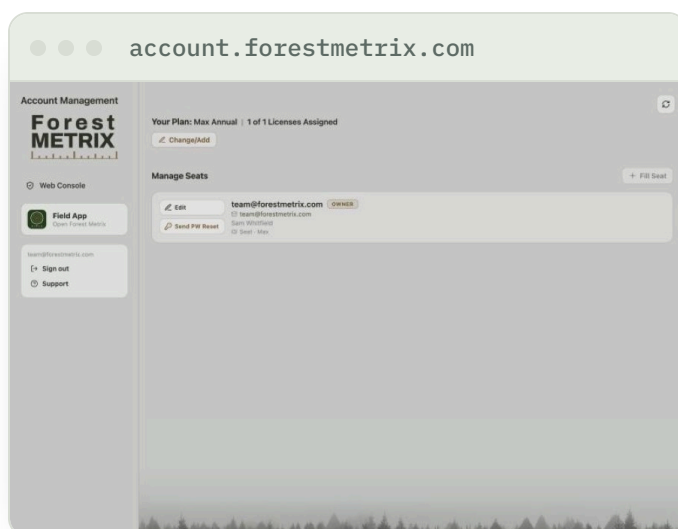
START HERE

Before anyone can sign in to the app, your company needs a Forest Metrix account. Accounts are created and managed on the account website, account.forestmetrix.com, not in the app.

1. **Create the account.** On the account website, open **Start Trial** and enter your name, company name, email address and a password. If your company already has an account, ask your administrator to add you instead.
2. **Add the people who will cruise.** The person who created the account is its owner. On the account page, the owner (or an administrator) assigns each person a seat with **Fill Seat**, using that person's email address. If every seat is taken, the page says so; adjust the number of seats first, then add the person.
3. **Install the app** on each phone or tablet and sign in with the same email address and password (section [1.4](#)).



1.1 Create the account on the account website.



1.2 The account page: your plan, seats, and the people in them.

On the account page

- **Manage Seats** lists everyone with a seat. **Edit** changes a person's details and **Send PW Reset** emails them a password reset link.
- **Field App** and **Web Console** open the app on the web and the Office pages, already signed in.
- **Support** lists ways to reach us.

Each seat is good for one phone or tablet at a time, as well as one computer (section [1.4](#)).

1.2 What Forest Metrix does

Forest Metrix is a timber cruising app. You navigate a property, add plots, and tally trees on your phone or tablet, then turn that data into stand and tract reports, stocking figures, product volumes and stumpage values.

Your work is organized the way a cruise is: a **project** covers one property or job; a project is divided into **stands**; each stand holds **plots**; and each plot holds the **trees** you tally there, along with any regeneration, coarse woody material, snags, notes and photos.

On a phone or tablet, everything you enter is saved on the device first. You can cruise all day with no signal; your changes upload on their own when you are back in coverage, and changes made on your other devices come in the same way. The web version of the app works from the cloud and needs a connection.

1.3 Basic, Pro and Max

Forest Metrix comes in three versions. Throughout this manual, features that need more than Basic carry a badge: **PRO** means Pro or Max, and **MAX** means Max only.

VERSION	WHAT IT ADDS
Basic	Projects, stands and plots; tree tallying; the standard reports; the Excel workbook export.
Pro	Maps, GPS tracks and waypoints, offline maps, boundaries and plot grids, stand tools, custom tree and plot fields, regeneration, snags and coarse woody material, custom reports, KML and USFS software exports, data import, FIA tools.
Max	NRCS soils, imported PDF and USGS topo maps, high-resolution offline maps, the parcel map, GeoJSON and Shapefile exports, densifying stands, custom volume tables, and Voice Tally.

Your account administrator manages which version your license includes. The app checks for changes on its own.

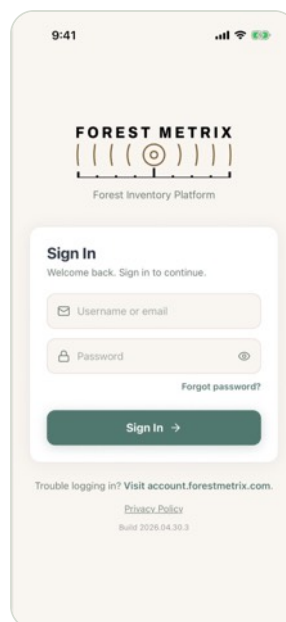
1.4 Signing in

Open Forest Metrix and sign in with your username or email and password. You use the same sign-in in the app, on the web, and on the Office pages.

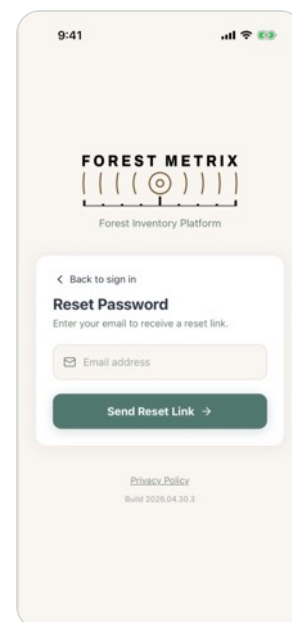
- **Forgot password?** asks for your email and sends a reset link. Open the link on your phone to set a new password.
- After your first sign-in on a phone, the app offers to turn on Face ID or fingerprint sign-in for next time.
- If the app can't reach the server but you signed in on this device before, **Continue offline** opens your projects anyway.

One phone and one computer at a time

You can be signed in on one phone or tablet and one computer at the same time. If you sign in on a second phone, it shows *This login is in use* and takes over after 30



1.3 Sign in.



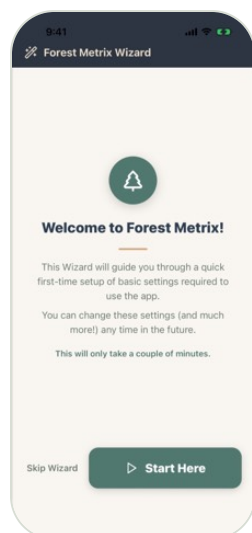
1.4 Forgot password sends a reset link.

seconds, or right away if you tap **Take over now**. The first phone then shows *Signed in elsewhere*.

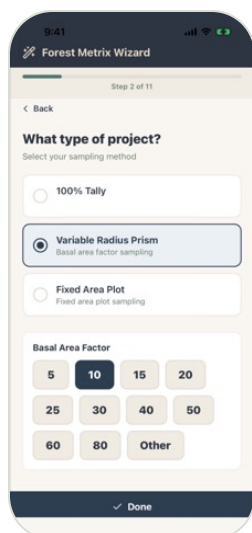
1.5 The Setup Wizard

The first time you sign in, the Setup Wizard asks eleven questions about how you cruise and saves the answers as your first **template**. A template is a set of starting settings that new projects copy. You can change every answer later, so pick what fits most of your work and keep going. **Skip Wizard** takes you straight to the app, and a template can be created later.

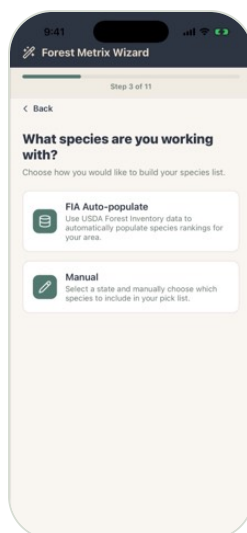
To run it again later without losing anything, go to **Settings** › **Template Settings** › **New Template** and choose **From Wizard**. That builds an additional template.



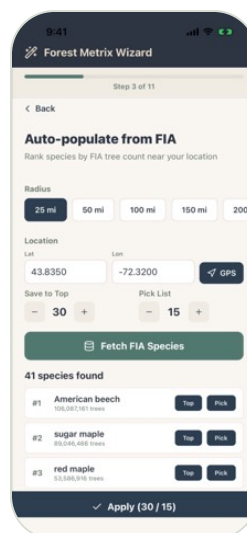
1.5 Welcome. Start Here, or Skip Wizard.



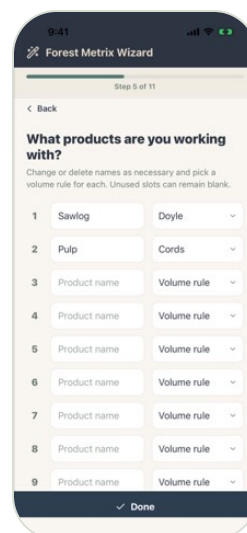
1.6 Sampling method, then the BAF or plot size.



1.7 Build your species list from FIA data or by hand.



1.8 FIA ranks the species found near you.



1.9 Name your products and pick a volume rule for each.

Forest Metrix Wizard

Step 6 of 11

How do you call products?

☒ I call products by heights

☐ I call every log product

☐ I dot tally

Done

1.10 How you call products.

Forest Metrix Wizard

Step 7 of 11

How do you call lengths/heights?

☒ A) 16' logs and half logs

☐ B) 8' sticks or bolts

☐ C) Number of feet

Done

1.11 How you call heights.

Forest Metrix Wizard

Step 8 of 11

How do you record DBH?

☒ 1" increments

☐ 2" increments

Done

1.12 DBH in 1" or 2" classes.

Forest Metrix Wizard

Step 9 of 11

Additional Tree Attributes

In addition to Species, DBH, HT, and Product, do you need to record additional attributes on trees, such as growing status, canopy position, live/dead, cut/leave, etc?

Yes No

1.13 Do you record anything beyond species, DBH, height and product?

Forest Metrix Wizard

Step 10 of 11

Custom Tree Data

Set up your optional tree fields

FIELD LABEL	PICK LIST	USE?
e.g. Cut/Leave	Tap to edit list	☐
e.g. AGS/UGS	Tap to edit list	☐
e.g. Canopy Position	Tap to edit list	☐
assign additional...	Tap to edit list	☐
assign additional...	Tap to edit list	☐
assign additional...	Tap to edit list	☐
assign additional...	Tap to edit list	☐
assign additional...	Tap to edit list	☐

Call Defect ☐

Call Total Height ☐

Done

1.14 Set up your own tree fields.

Forest Metrix Wizard

Your template is complete!

Give it a name and you're on your way.

My Template

Let's Go!

1.15 Name the template and finish.

What each step asks

- What type of project?** Choose 100% Tally, Variable Radius Prism or Fixed Area Plot. For a prism cruise, tap your basal area factor (5 to 80, or Other). For fixed plots, pick the plot size.
- What species are you working with?** *FIA Auto-populate* looks up the USDA Forest Inventory and Analysis trees around a location. Tap **GPS** to use where you are, choose a radius, and tap **Fetch FIA Species**. The most common

species go to the top of your list (Save to Top) and into your Pick List. *Manual* lets you choose a state and pick species yourself.

3. **Your tree list.** Rename any species (the name you choose is used everywhere, including reports) and tick the ones you want in your pick list.
4. **What products are you working with?** Product names, each with a volume rule such as Doyle, Scribner, International ¼", cubic feet, cords or tons.
5. **How do you call products?** By heights (pick a product, give its height, then the next product up the tree), every log (each 8' or 16' log gets a product), or Dot Tally (quick DBH-by-height counts). By heights asks for the length first, then the product. To give the product first instead, change **Entry Order** to *Product, then length* under **Settings** > **Tree Measurement Method** ([Chapter 5](#), section [5.2](#)); the wizard doesn't ask this yet.
6. **How do you call heights?** 16' logs and half logs, 8' sticks, or feet.
7. **How do you record DBH?** 1" or 2" classes.
8. **Additional tree attributes.** Answer Yes to set up your own fields, such as cut/leave, AGS/UGS or canopy position, each with an optional pick list. You can also turn on defect and total height here. Manual tree numbers are turned on later, under **Settings** > **Custom Tree Data**; you only need them when you assign tree numbers, such as for CFI plots or a high-value timber sale.
9. **Name your template** and tap **Let's Go!**

1.6 The Projects screen

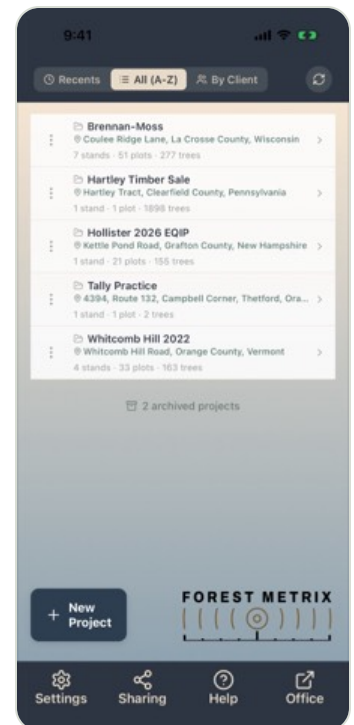
Every project you own or that has been shared with you is listed here. Tap a project to open it.

Each row shows the project name, its location, and how many stands, plots and trees it has. A folder icon means you own the project; a share icon means someone shared it with you.

Sorting

- **Recents** lists the projects you opened most recently first.
- **All (A–Z)** lists every project alphabetically.
- **By Client** groups projects under each client or landowner (fig. 1.18).

The round arrow at the top right checks the cloud and syncs every project. Use it when you expect a project from another device or a colleague and it hasn't yet synced automatically.



1.16 The Projects screen, sorted A–Z.

Project actions

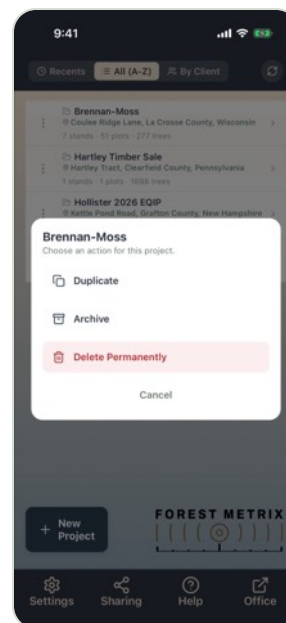
Tap the  at the left of a row for that project's actions:

- **Duplicate** makes a complete copy you can experiment with.
- **Archive** uploads any unsynced changes, clears that project's downloaded maps to free storage, and moves it to the archive. Archived projects stay in the cloud. Tap *N archived projects* at the bottom of the list to restore one.
- **Delete Permanently** removes the project for good.

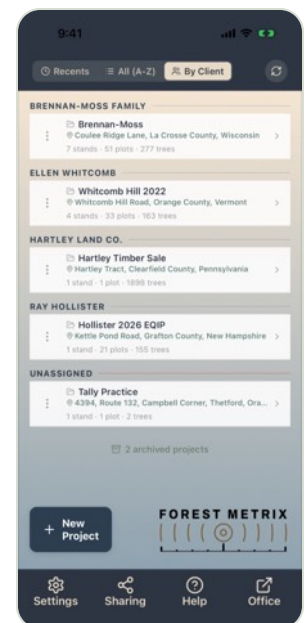
For a project shared with you, the only action is **Remove Shared Project**. It removes your access; the owner's copy is not affected.

The bottom bar

- **Settings** opens your templates and device settings.



1.17 Project actions.



1.18 Sorted By Client.

- **Sharing** shows what you have shared and what has been shared with you.
- **Help** opens the Quick Start, the Tech Manual and support contacts.
- **Office** opens the Office pages in your browser, already signed in.

1.7 Creating a project

Tap **New Project** on the Projects screen.

1. **Settings Source.** Choose where the new project's settings come from your active template, another saved template, or an existing project (useful when the new job matches one you have already cruised).
2. **Cruise Name.** Required, and it must be different from your other projects.
3. **Client / Landowner.** Pick a client, choose *New Client* to add one, or leave it Unassigned.
4. **Sampling Method** (see below).
5. **Plot Setup** (see below), then tap **Create Project**.

1.19 Settings Source: a template, or copy an existing project.

1.20 Sampling method and Plot Setup.

Sampling method

METHOD	WHAT YOU SET	HOW TREES ARE EXPANDED
Variable Radius BAF	The basal area factor of your prism or gauge.	Each tally tree represents $\text{BAF} \div \text{its basal area}$ trees per acre.
Fixed Area	Plot size, from 1/5 to 1/50 acre, or a custom radius in feet.	Each tree represents $1 \div \text{plot acres}$ trees per acre.
100% Tally	The stand's acres, typed in or taken from a boundary.	Per-acre values are $\text{total trees} \div \text{acres}$. No sampling error.
Double Plot / Big BAF	Plot-based or tree-based, a Measure BAF and a Count BAF.	Measured trees set the volume per unit of basal area; counted trees carry it to the whole sample.

You can change the method later in Edit Project. A stand can also use a different method from the rest of the project ([Chapter 3](#)).

Plot setup

- **Start with 1 Plot** creates one plot so you can start cruising right away and add plots as you go.
- **Set Number of Plots** creates that many numbered plots.
- **Boundary & Grid** **PRO** takes you to the map to draw or import the property boundary, then lay out a plot grid inside it ([Chapter 3](#)). With Max and a connection, it opens the parcel map first so you can pick the tax parcel.

For a 100% tally, this section reads *Stand Area*: choose

Enter Acres or **Draw / Import Boundary**.

This screenshot shows the 'New Project' setup screen for the 'Double Plot / Big BAF' method. The 'Cruise Name' is 'Maple Ridge 2026' and the 'Client / Landowner' is 'Unassigned'. Under 'Sampling Method', 'Variable Radius BAF' and 'Fixed Area' are selected, while '100% Tally' is unselected. A note explains that Double Plot / Big BAF uses measure plots/trees for full data and count plots/trees for species (and optional DBH). The 'Double Plot / Big BAF Type' section shows 'Plot-Based' (Entire plots are Measure or Count) and 'Tree-Based' (Individual trees are Measure or Count at each plot) options. The 'Measure BAF' section has a grid of buttons for values 5, 10, 15, 20, 25, 30, 40, 50, 60, and 80. The 'Other' field is set to 'BAF'. At the bottom, it says 'Percent BAF'.

1.21 Double Plot / Big BAF options.

This screenshot shows the 'New Project' setup screen for the '100% Tally' method. The 'Cruise Name' is 'Maple Ridge 2026' and the 'Client / Landowner' is 'Unassigned'. Under 'Sampling Method', 'Variable Radius BAF' and 'Fixed Area' are unselected, while '100% Tally' is selected. A note explains that 100% Tally creates a single plot where every tree in the stand is tallied. The 'Stand Area' section shows 'Enter Acres' and 'Draw / Import Boundary' options. A note states that after creating a boundary, you'll draw or import a boundary (KML/GeoJSON), and stand acreage is calculated from the boundary. A 'Create Project' button is at the bottom.

1.22 100% Tally asks for the stand area.

1.8 Project Home

Opening a project takes you to Project Home. Everything in the project starts here.

Top bar

- **Map** **PRO** the project map with boundaries, stands, plots, tracks and waypoints ([Chapter 7](#)).
- **Plots** the plot list, where you open a plot to tally it (Chapters 4 and 5).
- **Stands** your stands and their tools ([Chapter 3](#)).
- **Reports** every report for the project ([Chapter 8](#)).

The project card

Tap the project name, client or location to edit them, along with the sampling method and the parcel owner. Below is a count of stands, plots and trees.

- **Edit Boundaries** **PRO** shows the boundary's corners, acres and the parcel owner of record. Tap it to edit the boundary or set up a grid.
- **Project Notes** holds free-form notes for the whole project.

This screenshot shows the Project Home screen for 'Whitcomb Hill 2022'. The top bar has icons for Map, Plots, Stands, and Reports. The project name 'Whitcomb Hill 2022' is at the top, followed by the client 'Ellen Whitcomb' and location 'Whitcomb Hill Road, Vermont'. Below this, it shows '4 stands · 33 plots · 163 trees'. There are two main sections: 'Edit Boundaries' (Boundary set (33 vertices) · Tap to edit boundary or set grid. Owner: WHITCOMB, ELLEN) and 'Project Notes' (Enter from the gate on the town road. Stand 3 stays wet into June). At the bottom, there are icons for Settings, Import/Export, and Projects.

1.23 Project Home.

Quick buttons

PRO The row of icons near the bottom, left to right:

- **Save map for offline use.** Downloads map imagery for the project area. A check mark means it is saved.
- **Add waypoint.** Opens the map ready to mark a spot.
- **Start track.** Records your path while you walk. Tap again to stop.
- **Camera.** Opens the project's photos ([Chapter 6](#)).

Bottom bar

Settings opens this project's settings (changes affect this project only),

Import/Export holds sharing, copies, imports and every export, and **Projects** closes the project.

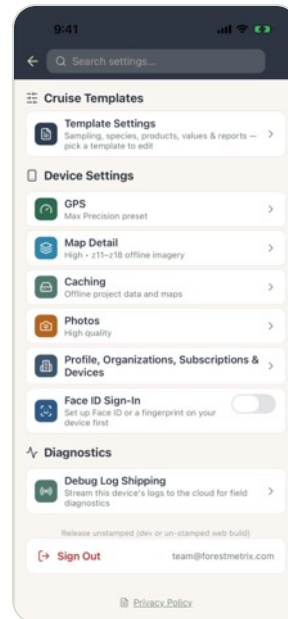
A strip above the bottom bar reports sync: *Synced* with the time, *Syncing...*, or *Sync pending* (tap it for details and a Retry button).

1.9 Templates in brief

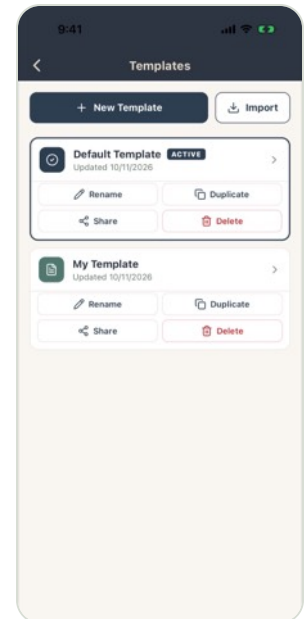
Settings live in two places:

- **Template Settings** are your saved starting points. Open **Settings** from the Projects screen and tap **Template Settings**. Changing a template affects projects you create from it later, never existing ones.
- **Project Settings** belong to one project. Inside a project, tap **Settings** on the bottom bar.

Device settings, such as GPS, offline maps and photo quality, apply to the phone you are holding, on every project. [Chapter 10](#) covers templates and [Chapter 11](#) every setting.



1.24 Settings, opened from the Projects screen.



1.25 Your templates. The active one is used for new projects.

Projects

Change a project's details, record notes, make copies to experiment with, and put finished work away.

2.1 Editing a project

On Project Home, tap the project name (or the client or location under it) to open **Edit Project**.

- **Project Name.** Required, and different from your other projects.
- **Client.** The landowner or client the work is for (optional; section [2.2](#)).
- **Location.** A road, town or tract description. It shows on the Projects screen and on reports.
- **Sampling Method** and its settings: the BAF, plot size or double-sampling setup ([Chapter 1](#), section [1.7](#)).
- **Parcel Owner.** The owner of record. When you pick a tax parcel on the parcel map, this fills in for you.
- **Notes.** The same notes as the Project Notes card.

Tap the check mark at the top right to save, or the × to leave without saving.

SHARED PROJECTS

If a project was shared with you, its name, client and location are locked. Only the owner can change them.

The screenshot shows the 'Edit Project' screen with the following details:

- Project Name:** Whitcomb Hill 2022
- Client:** Ellen Whitcomb
- Location:** Whitcomb Hill Road, Orange County, Vermont
- Sampling Method:** Variable Radius BAF (selected), Fixed Area, 100% Tally
- Double Plot/ Big BAF:** (empty field)
- Basal Area Factor (BAF):** 5, 10, 15, 20 (selected), 25, 30, 40, 50, 60, 80
- Other:** BAF
- Parcel Owner:** WHITCOMB, ELLEN
- Notes:** (empty field)

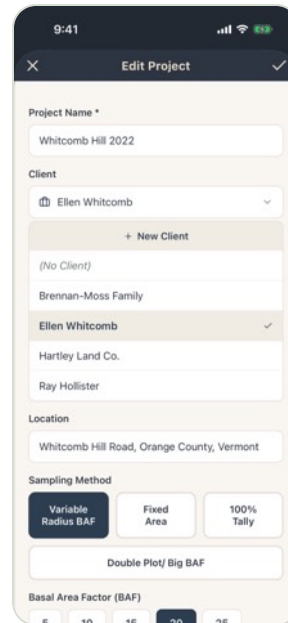
2.1 Edit Project.

2.2 Clients and landowners

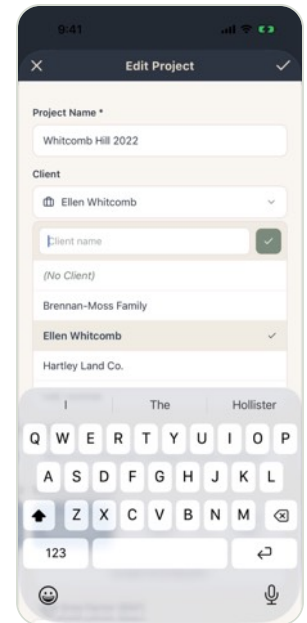
Clients keep your projects organized by whom the work is for. Each project has one client, or none.

- Tap the **Client** box in New Project or Edit Project to pick from your clients.
- Tap **+ New Client**, type the name, and tap the check mark to add one on the spot.
- Choose *(No Client)* to leave the project unassigned.

On the Projects screen, **By Client** groups your projects under each client. The Office pages offer more client tools, such as contact details and a project history for each client.



2.2 Choose a client.



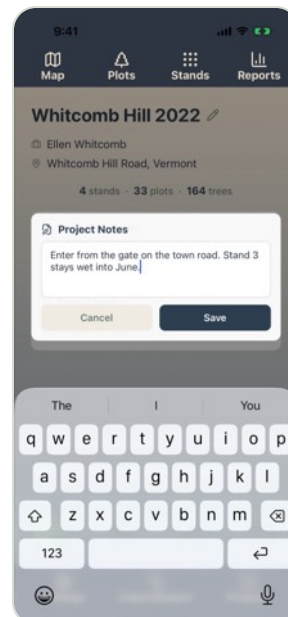
2.3 Add a client by name.

2.3 Project notes

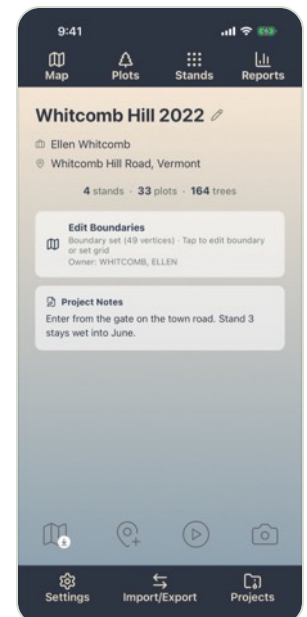
Project notes hold anything the whole crew should know: access, gates, hazards and landowner requests.

1. On Project Home, tap the **Project Notes** card.
2. Type your notes and tap **Save**.

Notes sync with the project, so everyone working on it sees them. Each plot also has its own notes ([Chapter 6](#)).



2.4 Writing project notes.



2.5 The note on Project Home.

2.4 Working copies

A working copy is a complete, independent duplicate of a project: every stand, plot, tree and setting. Use one to try a different volume rule, product setup or stand layout without touching the original.

1. Open the project and tap **Import/Export** on the bottom bar.
2. Tap **Save Working Copy**.
3. Keep the suggested name (the original's name with `_copy_1`) or type your own.
4. Tap **Save to Projects** to add the copy and stay where you are, or **Save & Open Copy** to switch to it.

You can also tap **:** beside a project on the Projects screen and choose **Duplicate**. Either way, you own the copy. Only your own projects can be copied; a project shared with you can't be.

2.5 Archiving and restoring

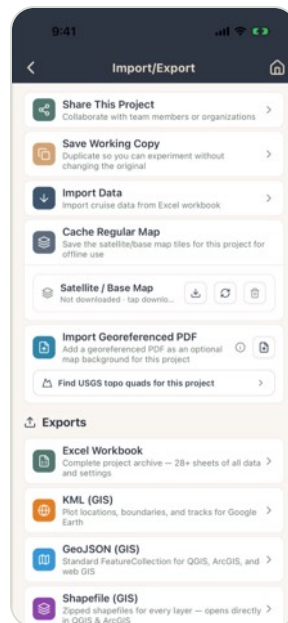
Archive a project when the work is done. It leaves your Projects list and frees the storage its downloaded maps were using, but stays safe in the cloud.

1. On the Projects screen, tap **:** beside the project (or press and hold the row) and choose **Archive**.
2. Confirm with **Archive**. Any changes not yet uploaded go up first.

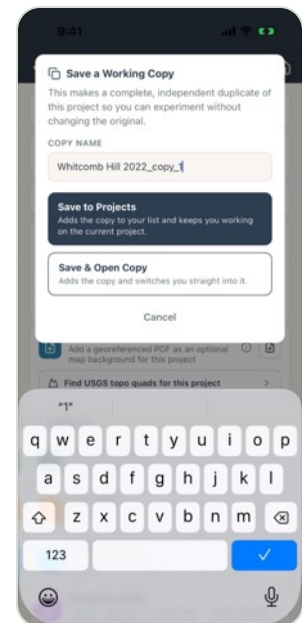
To bring a project back, tap *N archived projects* at the bottom of the list, then **Restore**.

GOOD TO KNOW

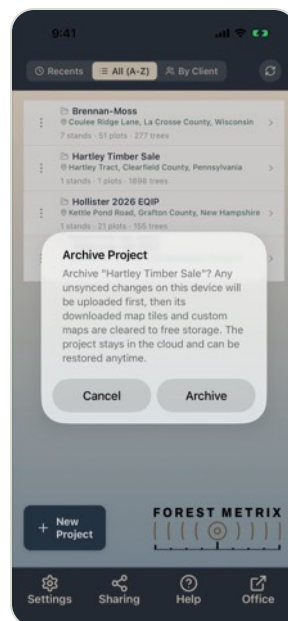
If someone adds data to a project that was archived from the Office pages, the project comes back out of the archive on its own, so fieldwork is never hidden.



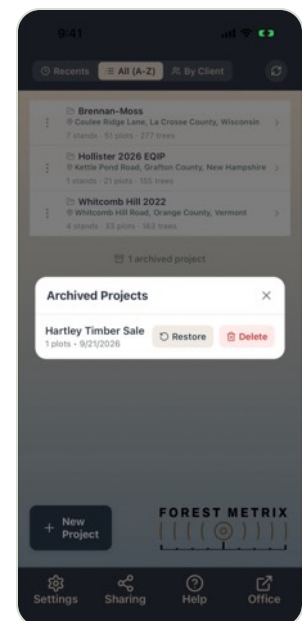
2.6 Import/Export.



2.7 Name the copy and save it.



2.8 Archiving a project.



2.9 Restore an archived project.

2.6 Deleting a project

Deleting removes a project and all of its data for good, on every device and in the cloud. It cannot be undone.

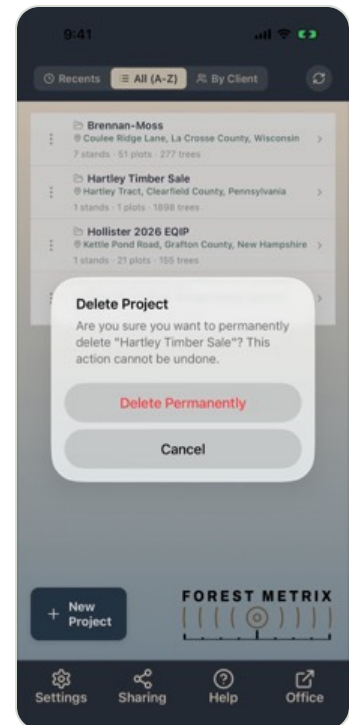
1. On the Projects screen, tap  beside the project and choose **Delete Permanently**.
2. Read the confirmation and tap **Delete Permanently** again.

BEFORE YOU DELETE

If there is any chance you will need the data again, archive the project instead, or export an Excel workbook first ([Chapter 9](#)).

For a project someone shared with you, the menu offers

Remove Shared Project instead. It removes your access and leaves the owner's project untouched.



2.10 Deleting asks you to confirm.

2.7 Project photos PRO

Project photos belong to the whole project rather than one plot: the landing, a road, a property corner, a view across a stand. (Photos taken at a plot are covered in [Chapter 6](#).)

1. On Project Home, tap the camera button.
2. Tap **Add Photo** to take one with the field camera, or **Library** to pick one you already took.
3. Add an optional caption. Turn on **Stamp location on photo** to print the coordinates, altitude, compass bearing, grade and time in a small box in the corner of the photo. The app remembers this choice.
4. Tap **Save Photo**.

Tap a photo to see it full size or delete it. Photos upload on their own when you have a connection and then appear on your other devices.

Photo size, saving a copy to your phone's photo library, and Wi-Fi-only uploads are set under **Settings** > **Photos** ([Chapter 11](#)).

2.8 Sync status

Project Home shows how the project stands with the cloud in a strip above the bottom bar:

YOU SEE	WHAT IT MEANS	WHAT TO DO
Synced · 3:56 PM	Everything on this device is in the cloud, as of that time.	Nothing.
Syncing...	An upload or download is under way.	Nothing. You can keep working.
Sync pending	Changes are waiting to upload, usually because there is no signal.	Keep working. They go up when you are back in coverage. Tap the strip to see why, or to try again now.
Newer data is arriving	Someone changed this project on another device.	Tap Get it now to load it straight away.
Access Revoked	The owner stopped sharing this project with you.	The project is now read-only on your device.

[Chapter 12](#) explains how sync works in detail, including what happens when two people edit the same plot.

Stands and boundaries

Define the project area, lay out a cruise grid, and stratify stands. This chapter covers the project boundary, plot layout, and drawing and importing stand boundaries. All of this can be done in a web browser, where a big screen and a mouse make it easier than on the phone.

3.1 Boundaries and stands

A project has two kinds of outline:

- **The project boundary** is the edge of the property you are cruising, usually the tax parcel. It sets the area for the grid layout and is the frame that stands are drawn inside. A project has one, which can be made of several separate pieces.
- **Stand boundaries** divide that ground into management units. Each stand has its own acreage, its own plots, and if you like its own sampling method. Reports summarize each stand and roll the stands up into the whole property.

Every plot belongs to one stand. When a plot has a GPS location, the app places it in the stand whose boundary contains it, and moves it if you move the plot or redraw the boundary (section [3.10](#)).

VERSIONS

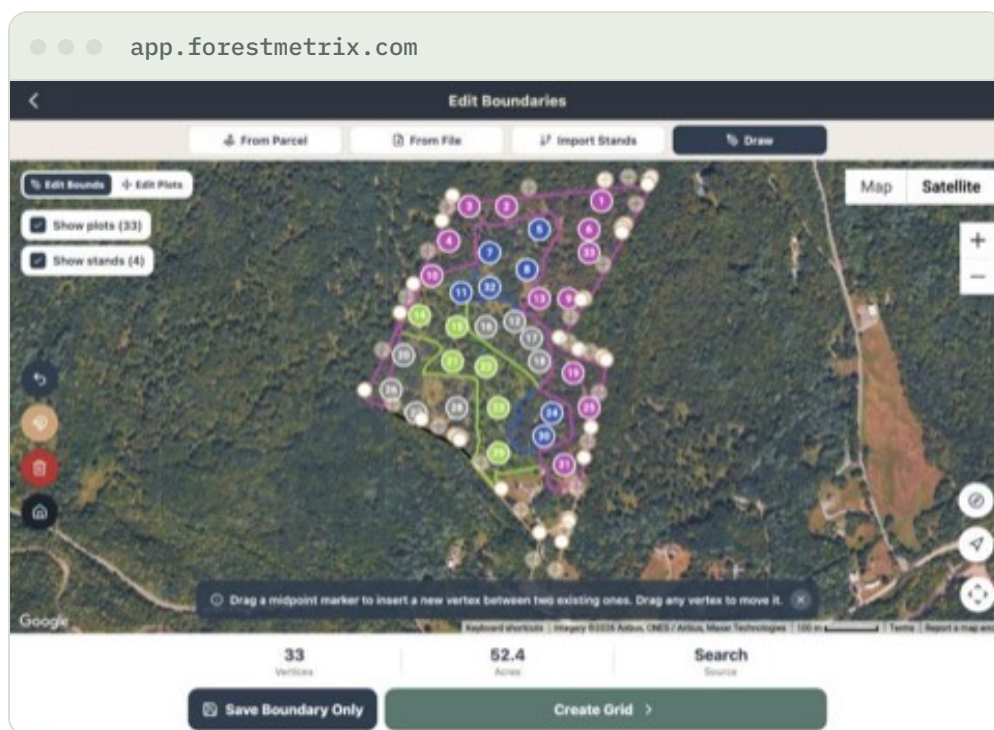
Boundaries, maps and the grid layout are part of **PRO**. In **Basic**, stands are a plain list: you type each stand's acreage and move plots between stands by hand. Parcel boundaries, Density and NRCS soils are **MAX** features.

Do the map work on a computer

Drawing a boundary means placing dozens of corners exactly, and a fingertip covers a lot of ground on a phone screen. We recommend setting up boundaries, stands and the plot layout at a desk, then taking the phone to the woods.

1. On your computer, go to **app.forestmetrix.com** and sign in with your usual login, or click **Field App** on the account page ([Chapter 1](#)).

2. Open the project. Every screen in this chapter is there, in the same place as on the phone, over Google satellite imagery.
3. Make your changes. They save to the cloud as you go.
4. Before you head out, open the project on the phone while it has a connection. It picks up the new boundaries, stands and plots within about a minute. Tap the map icon at the bottom of Project Home to save the map for offline use. If the phone had already saved this project's map and you made the boundary bigger, download the map again too: **Settings** > **Caching**, tap the project, then ↻ next to the map ([Chapter 7](#), section [7.7](#)).



3.1 The boundary editor in a browser: the same editor as on the phone, with room to see the whole property.

In the browser, the instructions in this chapter translate like this:

ON THE PHONE	IN THE BROWSER
Tap	Click.
Drag a corner or a plot	Click and drag it. Zoom in first to place it precisely.
Long-press a corner to remove it	Click the corner. Hold the pointer over a corner to see which one it is.
Pinch to zoom	Scroll wheel or trackpad, or the + and – buttons.
Pick a file in Files	Pick it from your computer's folders. KML and GeoJSON files from a GIS are usually on the computer already, so imports are easier there too.

ONE DEVICE AT A TIME PER STAND

You can be signed in on a phone and a computer at once ([Chapter 1](#)). Don't edit the same boundary on both at the same time, or one set of changes can overwrite the other.

3.2 The project boundary

On Project Home, tap the **Edit Boundaries** card. It reads *Set Boundaries* until a boundary exists. Across the top are four ways to make one:

- **From Parcel** **MAX** picks tax parcels off a map. Needs a connection.
- **From File** reads a polygon from a KML or GeoJSON file.
- **Import Stands** builds the stands and the boundary together from a file of stand polygons ([section 3.8](#)).
- **Draw** lets you tap the corners onto the map yourself.

Along the bottom, the app shows the number of **Vertices** (corners), the **Acres** inside, and the **Source**: Drawn, File or Search (parcel). **Show plots** and **Show stands** overlay the existing plots and stand outlines so you can line the boundary up against them.



3.2 The boundary editor: 33 vertices, 52.4 acres.

Picking a tax parcel

From Parcel opens **Select from Parcel Map**, with county parcel lines in yellow over the imagery.

1. Pan to the property. **Road** switches to a street map if that helps you find it.
2. Tap each parcel that makes up the property. Tap a selected parcel again to drop it.
3. The panel at the bottom lists each selected parcel with its address and owner of record. **Clear** starts over.
4. Tap **Use Parcels**. Parcels that touch become one outline; parcels that don't become separate pieces of the same boundary. Stand 1 takes the whole boundary.

With more than one parcel selected, tick

Keep each parcel as a separate stand to make each parcel its own stand instead.

The owner of record fills in **Parcel Owner** on the project, and the location fills in if it was blank.

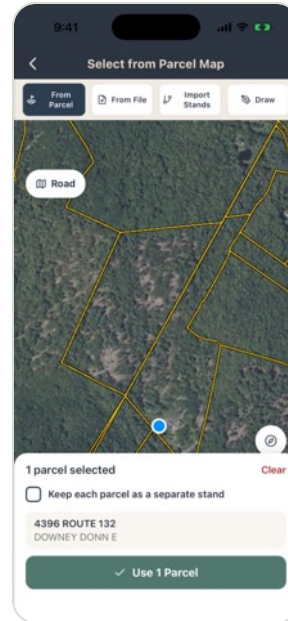
If the project already has a boundary, the app asks before replacing it. Nothing changes until you tap **Use Parcels**.

From a file

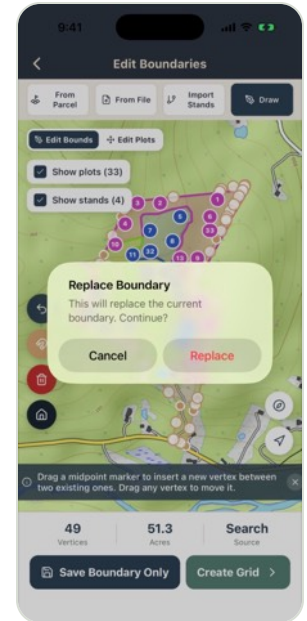
From File opens your phone's file picker. Choose a **.kml**, **.geojson** or **.json** file containing a polygon, for example one exported from Google Earth or a GIS. The outline replaces the current boundary and the map zooms to it. Shapefiles can't be read directly: convert them to KML or GeoJSON first.

Drawing and editing

- **Add a corner:** in Draw mode, tap the map. You need at least three.
- **Move a corner:** drag it.
- **Add a corner between two others:** drag the small midpoint marker on the edge between them.



3.3 One parcel selected, with its owner of record.



3.4 Replacing an existing boundary asks first.

- **Remove a corner:** tap it (or long-press), then confirm. A boundary can't drop below three corners.

The buttons on the left side of the map:

BUTTON	WHAT IT DOES
Undo	Reverses the last change: a move, an added or removed corner, or a snap.
Snap (magnet)	Moves boundary corners within 100 ft of a stand corner or edge onto it, so the boundary and the stands share an edge. If nothing is that close, it offers to try 300 ft.
Clear (trash)	Removes every corner so you can start over. Asks first.
Home	Returns to Project Home.

Tracing a boundary along a road, a wall or a change in the canopy is much easier on a computer, where the same editor fills the screen (section [3.1](#)).

When you are done, tap **Save Boundary Only** to keep the boundary and return to Project Home, or **Create Grid** to save it and go on to lay out plots (section [3.4](#)).

3.3 Moving plots on the map

The boundary editor has two modes, chosen above the map: **Edit Bounds** moves boundary corners, and **Edit Plots** moves plots. In Edit Plots mode the corners are locked and every plot with a location can be dragged.

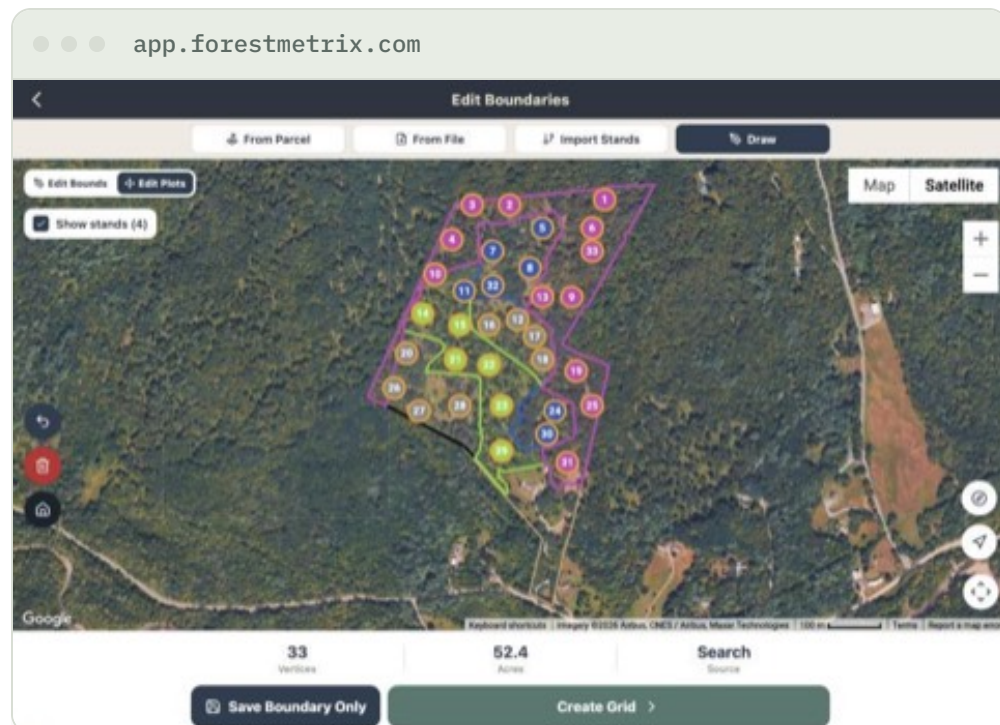
- Drag a plot to its new spot. The move is saved as soon as you let go.
- Undo puts the most recently moved plot back where it was.
- A plot dragged into a different stand moves to that stand (section [3.10](#)).

Use this to nudge a grid point off a road or out of a pond before anyone walks to it. Plots you add by hand have no location until the first tree is tallied on them; then the app records the GPS position automatically ([Chapter 4](#)).



3.5 Edit Plots mode.

Moving plots is one of the jobs best done in a browser (section [3.1](#)): zoom in on the imagery, then click and drag each plot clear of the road, the pond or the clearing.



3.6 Edit Plots in a browser: every plot on the property at once.

3.4 Laying out plots

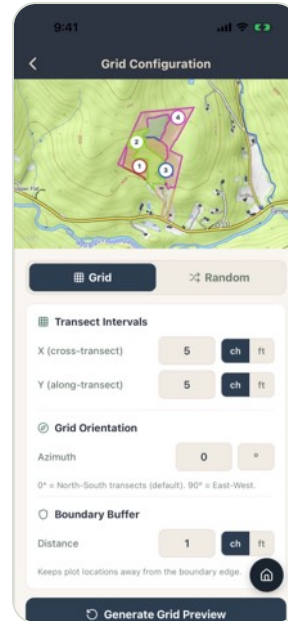
With a boundary saved, tap **Create Grid** in the boundary editor to open **Grid Configuration**. Choose a systematic **Grid** or a **Random** layout, adjust the settings, then tap **Generate Grid Preview**. The proposed plots appear on the map with a count and the acreage. Change any setting and tap **Regenerate Preview** until you are happy, then tap **Create N Plots from Grid**.

CREATING A GRID REPLACES EVERY PLOT

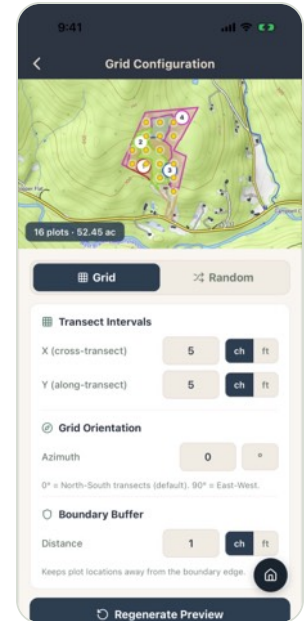
If the project already has plots, creating new ones deletes all of them, along with any trees, regeneration and other data recorded on them. The app warns you and asks you to confirm **Delete & Replace**. Lay out the grid before the crew starts tallying. To add plots to a project that already has data, use [Densify](#) (section [3.11](#)).

Grid

- **Transect Intervals.** X (*cross-transect*) is the distance between transect lines; Y (*along-transect*) is the distance between plots on a line. Enter each in chains or feet. A 5×5 chain grid is one plot per 2.5 acres.
- **Grid Orientation.** The azimuth of the transect lines: 0° runs them north–south, 90° east–west. Turn the grid to run along the slope or square with a road.
- **Boundary Buffer.** Keeps plots this far inside the boundary so none land on the line.



3.7 Grid settings.



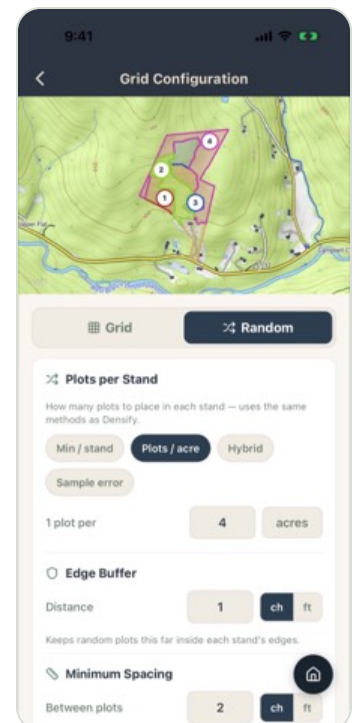
3.8 The preview: 16 plots on 52.45 acres.

Random

A random layout places plots inside each *stand*. If you haven't drawn stands yet, it treats the whole property as one area; once you've drawn the stands, plots move into them by location (section 3.10), and you can add more where needed with *Densify* (section 3.11). **Plots per Stand** sets how many, using the same four methods as *Densify* (section 3.11):

- **Min / stand**: at least this many plots in every stand.
- **Plots / acre**: one plot per this many acres.
- **Hybrid**: whichever of the two gives more.
- **Sample error**: enough plots to reach a target error on basal area at your chosen confidence, given an estimate of the BA coefficient of variation. Plots are shared out by acreage using $n = (z \cdot CV/E)^2$.

Edge Buffer keeps plots this far inside each stand's edge, and **Minimum Spacing** re-rolls any plot that lands closer than this to another.



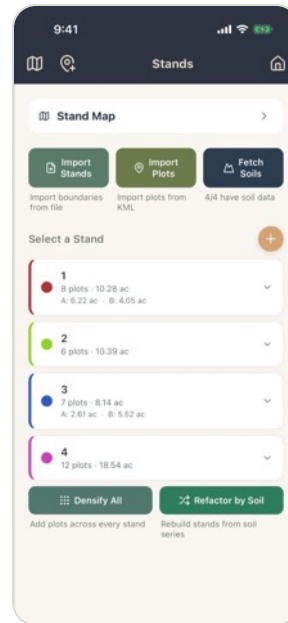
3.9 Random layout.

3.5 The Stands screen

Tap **Stands** at the top of Project Home. The screen opens with the stand map collapsed, three tools, then your stands:

- **Import Stands** and **Import Plots** read stand polygons and plot points from files (section 3.8).
- **Fetch Soils** **MAX** downloads NRCS soil data for every stand with a boundary (section 3.12). The caption shows how many have it.
- Each stand card shows its number and color, its plot count and acreage. A stand made of more than one piece lists each one: *A: 6.22 ac · B: 4.05 ac*.
- Tap **+** to add a stand (section 3.6), or a stand's card to open its actions (section 3.9).

Below the list, **Densify All** adds plots to every stand (section 3.11) and **Refactor by Soil** **MAX** rebuilds the stands from soil series (section 3.12).

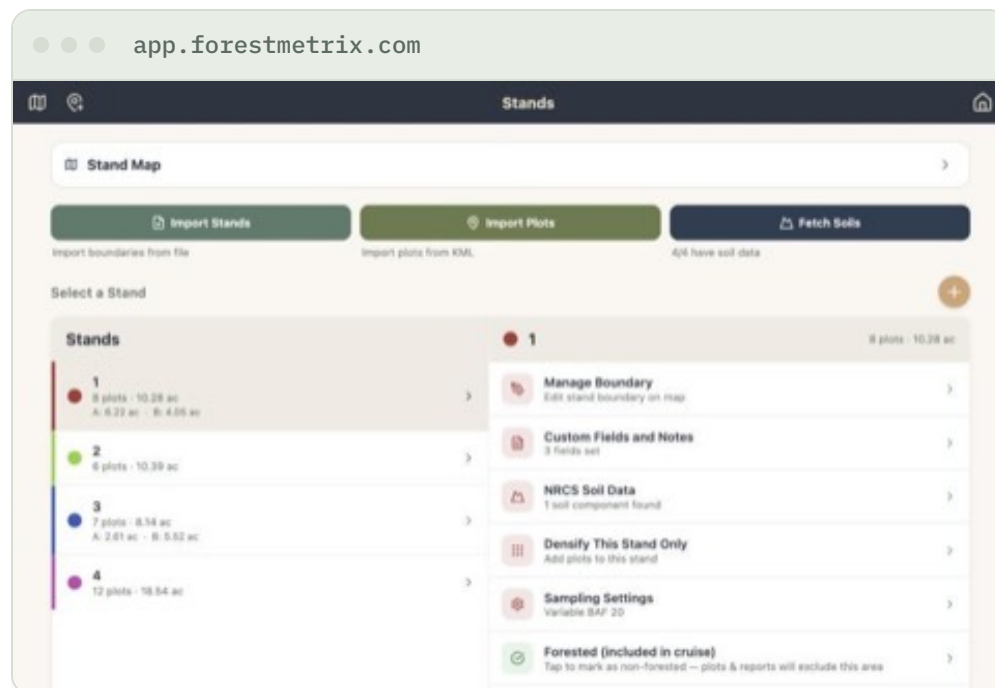


3.10 The Stands screen.



3.11 The stand map, opened.

In a browser window, the stand list and the selected stand's actions sit side by side, so you can work down the stands without going back and forth.



3.12 The Stands screen in a browser.

The stand map

Tap **Stand Map** to open it. Each stand is filled in its color and labeled with its number; separate pieces of one stand are lettered (1A, 1B).

- **Plots** overlays the plot numbers. **Color by Stand** colors each plot by its stand; **Completion** colors visited plots green and unvisited ones red, which makes it easy to see what's left to cruise.
- **Cache**, **Custom** and **Live** choose the map source: offline tiles you saved, a custom map you imported, or live imagery ([Chapter 7](#)).
- **Weld** lines up stand edges that should touch but were drawn a little apart. Give it a distance in feet; it previews how many shared borders it found, then aligns them when you apply.



3.13 Plots colored by stand.



3.14 Colored by completion: green plots are done.

3.6 Adding a stand

On the Stands screen, tap **+**.

- **Stand Name** and **Number** are required. The number fills in with the next one free.
- **Plots to Create** makes that many numbered plots in the new stand straight away, without locations. Handy when you'll find the plots in the field. Leave it at 0 to add plots later.
- **Sampling Method** shows the project's default. Turn on **Override for this stand** to give this stand its own BAF, plot size or a 100% tally.
- **Acres** and **Notes** are optional. Acres fills in from the boundary once you draw one.
- **Your stand fields** (Forest Type, Size Class and Stocking here) come from **Settings** > **Stand Optional Fields** ([Chapter 10](#)). Fill them now or later under the stand's **Custom Fields and Notes** ([section 3.9](#)).

Tap the check mark. In **PRO** and **MAX** the app goes straight to the map so you can draw the stand's boundary ([section 3.7](#)).

A screenshot of the 'New Stand' form in the app. The form is titled 'New Stand — Whitcomb Hill 2022'. It has two main sections: 'Stand Name' and 'Number'. The 'Stand Name' field contains 'Sugarbush' and the 'Number' field contains '5'. Below these fields is a 'Plots to Create' field with a value of '0'. There is a note: 'Auto-creates numbered plots assigned to this stand'. The 'Sampling Method' section has a dropdown menu set to 'Cruise default: Variable Radius (BAF 20)' and a toggle switch for 'Override for this stand'. The 'Acres' field has a value of '0.0'. The 'Forest Type' section has a dropdown menu set to 'Select forest type'. The 'Size Class' section has a dropdown menu set to 'Select size class'. The 'Stocking' section has a dropdown menu set to 'Select stocking'. There is a 'Notes' field at the bottom.

3.15 New Stand.

3.7 Drawing a stand boundary

Open a stand's actions and tap **Manage Boundary**. The map shows this stand's outline with its corners, other stands around it, and the project boundary.

- Tap the map to add corners. Drag a corner to move it, drag a midpoint marker to insert one, long-press a corner to remove it.
- Corners **snap** to the project boundary and to neighboring stands when you drop them close, so stands share edges without gaps or overlaps.
- Orange corners belong to this stand's other pieces. Drag them to edit that piece.
- **Add Piece** starts a separate piece of the same stand, for a stand split by a road or a field. Finish the current piece (three corners or more) first.
- **Fill Parcel** at the top right makes this stand cover all the parcel that no other stand has claimed. It's the quickest way to draw the last stand.
- **Undo** reverses the last change; **Delete All** clears the corners you are drawing.

The strip along the bottom shows the corner count, acreage and number of plots inside. Tap **Save** when you are done. Plots are reassigned to stands by location as soon as you save.



3.16 Editing Stand 1: 23 corners, 6.22 acres, 4 plots.

Carving stands out of Stand 1

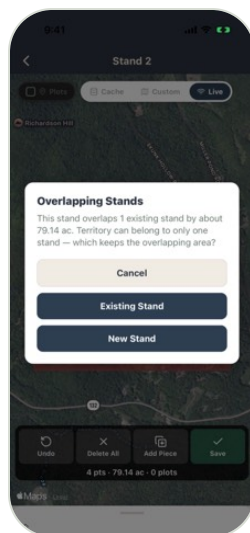
Every project starts with one stand. When you draw the project boundary, Stand 1 takes all of it. The easiest way to divide the property is to leave Stand 1 alone and draw the other stands inside it:

1. On the Stands screen, tap **+** to add Stand 2 (section 3.6). The map opens.
2. Draw Stand 2's boundary over the part of Stand 1 it should take, and tap **Save**.
3. The app sees the overlap and asks which stand keeps that ground. Choose **New Stand**. Stand 1 shrinks to whatever is left.
4. Repeat for each stand. Stand 1 ends up as the remainder, so you never have to drag its corners back. If a new stand sits in the middle of Stand 1, Stand 1 is left in parts (A, B) on either side of it.

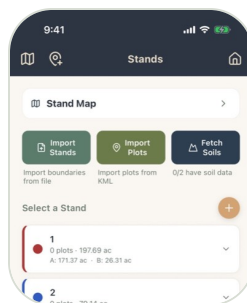
Choosing **Existing Stand** instead trims the new stand to the open ground. Plots move to their new stands as soon as you save.



3.17 Stand 2 drawn over part of Stand 1.



3.18 Choose New Stand; Stand 1 shrinks.

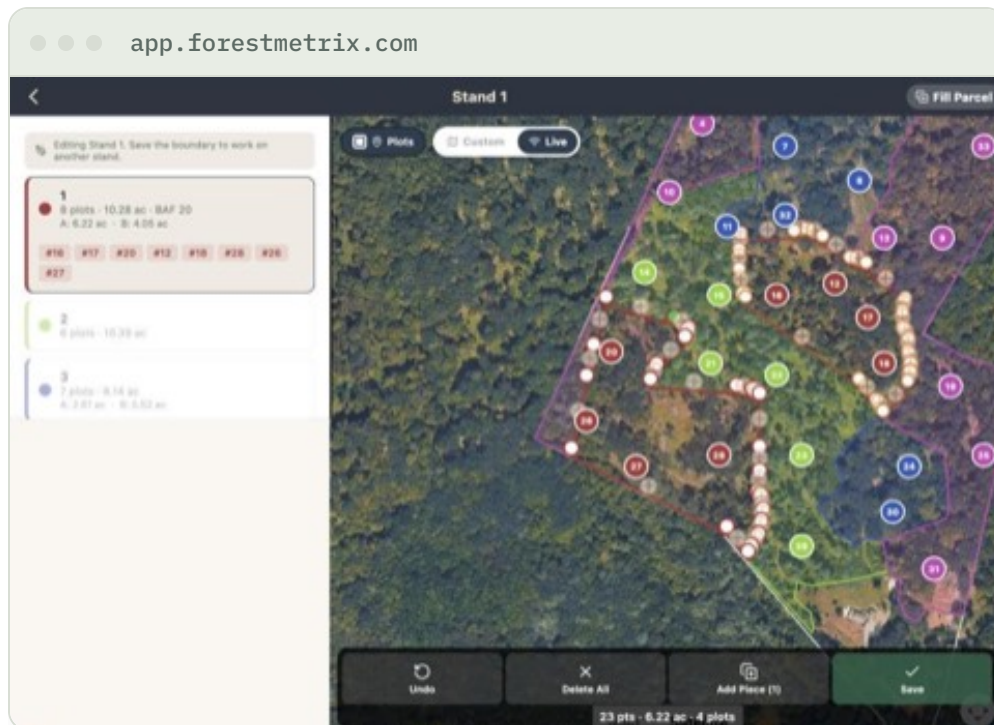


3.19 Stand 1 is what's left; here, in two parts either side of Stand 2.

Drawing stands in a browser

This is where a computer helps most. A stand line follows what you can see in the imagery (a change in the canopy, a stone wall, a brook), and you can zoom in far enough to place each corner on it. In a browser:

- The stand list runs down the left, with the selected stand's plot numbers. Click another stand to edit it next; save the one you're on first.
- Click the map to add a corner, drag a corner to move it, and click a corner to remove it.
- Turn on **Plots** to see which plots fall inside as you draw.



3.20 Editing Stand 1 in a browser, with plots shown.

3.8 Importing stands and plots

If the stands were mapped in a GIS or Google Earth, import them instead of drawing them. Use a KML file with one named polygon placemark per stand, or a GeoJSON file with one feature per stand.

From the Stands screen

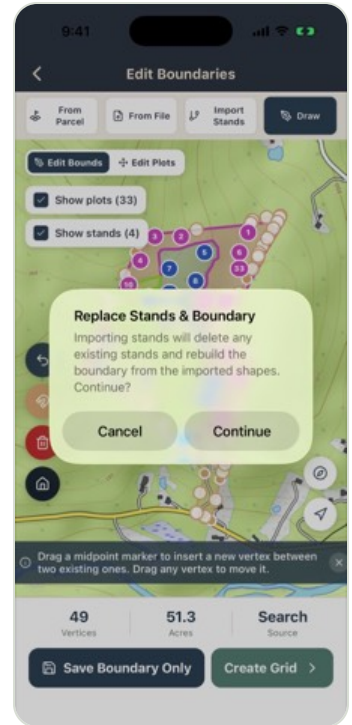
Import Stands on the Stands screen adds boundaries to the project you have. After you pick the file, the app shows each shape on a small map.

1. Tap a shape to highlight it, then type its stand number.
2. A number that matches an existing stand attaches the boundary to that stand. Any other number creates a new stand. Give two shapes the same number to make one stand with two pieces.
3. Switch on **Skip** for any shape you don't want.
4. If a shape overlaps an existing stand, the app asks which stand keeps the overlapping ground before it applies anything.

From the boundary editor

Import Stands in the boundary editor starts over: it **deletes every existing stand** and builds the stands and the project boundary from the file. The app asks before it does. Every shape needs a stand number you type; nothing is numbered for you. Use this for a new project. Use the Stands screen import to add to one that already has stands.

Plots that already have locations are placed into the imported stands by where they fall.



3.21 Importing from the boundary editor replaces the stands.

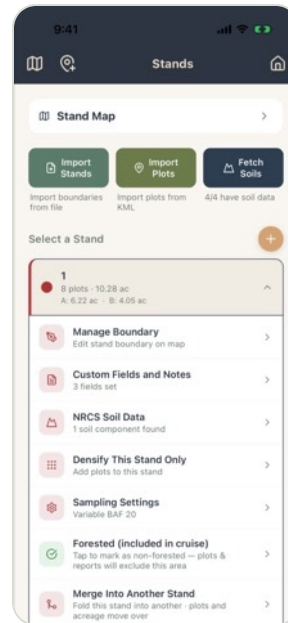
Importing plots

Import Plots reads plot points from a KML file, such as a plot layout made in another program. The app works out which field in the file holds the plot number and asks if more than one could. Each point goes into the stand it falls in, which you can change before you apply. Plot numbers already in the project are skipped. [Chapter 4](#) covers plot import in detail.

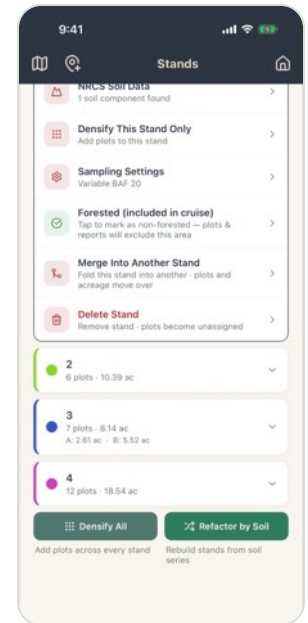
3.9 Stand actions

Tap a stand on the Stands screen to open its actions:

ACTION	WHAT IT DOES
Manage Boundary	Draw or edit the stand's outline (section 3.7).
Custom Fields and Notes	Name, forest type, size class, stocking, acreage, grouping, forested and notes. See below.
NRCS Soil Data	MAX Soils under this stand (section 3.12).
Densify This Stand Only	MAX Add plots to this stand (section 3.11).
Sampling Settings	Give this stand its own sampling method.
Forested	Tap to mark a field, pond or other open ground as non-forested. Its acreage stays in the project but reports leave it out, and Densify and random layouts don't place plots there. Plots don't belong in a non-forested stand: any that are inside it are left out of reports.
Merge Into Another Stand	Fold this stand into another. Its outline becomes part of the other stand and its plots move over.
Delete Stand	Removes the stand. Its plots are kept but belong to no stand until you assign them.



3.22 A stand's actions.

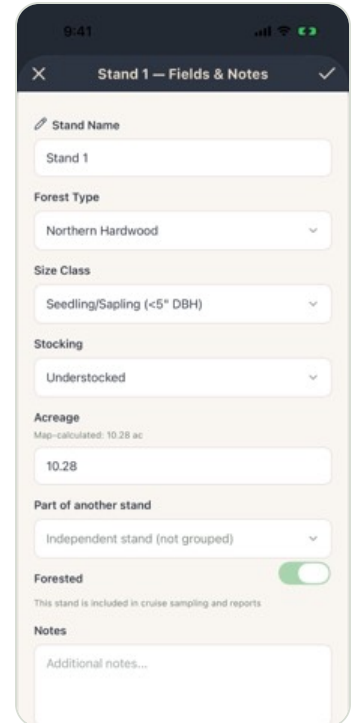


3.23 Scrolled down: Merge and Delete.

Fields and notes

- **Stand Name** is the only fixed field.
- Below it are **your stand fields**, such as forest type, size class or stocking: whatever labels you set up under **Settings** > **Stand Optional Fields** ([Chapter 10](#)). If none are set up, the screen says so.
- **Acreage** shows the map-calculated area above the box. Type a different figure to override it, for example to match a survey. Reports use the figure in the box.
- **Part of another stand** groups this stand under a parent, so its plots and tallies roll up into the parent's totals. Choose *Independent stand* to undo it.
- **Forested** is the same switch as the Forested action.

If your template has custom stand fields ([Chapter 10](#)), they appear below the notes. Tap the check mark to save.



3.24 Stand fields and notes.

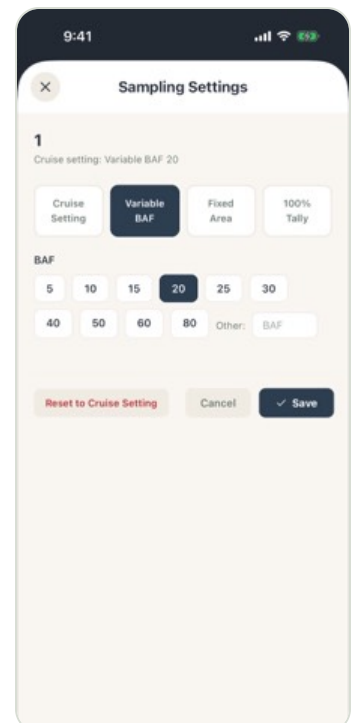
Sampling settings for one stand

Every stand uses the project's sampling method unless you change it here. Choose **Variable BAF**, **Fixed Area** or **100% Tally** and its settings, then tap **Save**. **Reset to Cruise Setting** goes back to the project's method.

Use it when one stand calls for different sampling: a BAF 10 in a young stand where the rest of the property is BAF 20, or a 100% tally in a small, high-value stand.

CHANGE IT BEFORE TALLYING

Trees already tallied keep the method they were recorded with. Changing a stand's method after work has started mixes two methods in one stand.

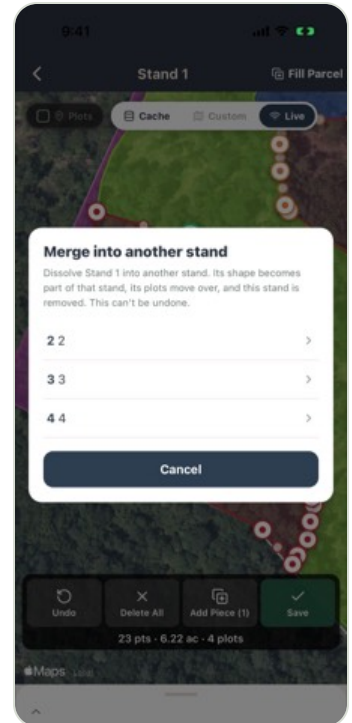


3.25 Stand 1 uses BAF 20.

Merging stands

Tap **Merge Into Another Stand** and choose the stand to merge into. The app summarizes what will move and asks you to confirm. The merged stand's shape joins the other stand, its plots move over, and it's removed. This can't be undone, so check the summary.

To split a piece back out of a stand, open **Manage Stands** (section [3.10](#)), tap the piece on the map and choose **Promote Area to New Stand**. Plots inside it move to the new stand. **Move Area** on the same menu hands a piece to another existing stand.



3.26 Choose the stand to merge into.

3.10 Which stand a plot belongs to

A plot with a GPS location belongs to the stand whose boundary contains it. The app keeps this up to date for you:

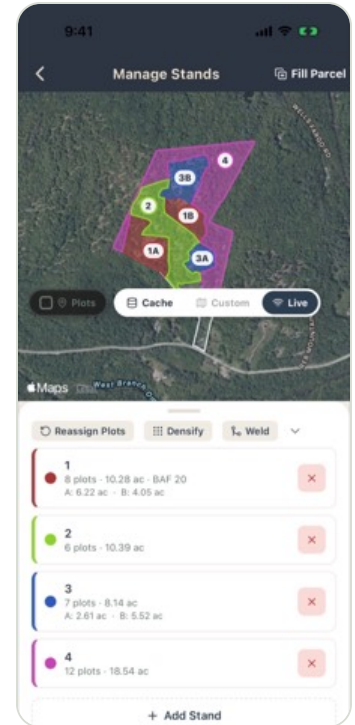
- Plots made by the grid, an import or Densify go into the stand their location falls in. One that falls outside every stand is left unassigned.
- A plot you drag to a new spot (section [3.3](#)) follows it into the right stand.
- When you save a stand boundary, merge stands, weld edges or import stands, plots are reassigned by location.

A plot that moves outside every stand boundary keeps the stand it had, so GPS error at a stand edge can't drop it from its stand. A plot you placed with Assign Plots stays where you put it. A plot added by hand keeps the stand you chose, even after its first tree records a GPS position.

Manage Stands and Reassign Plots

For an overview of every stand on one map, go to **Plots** > **By Stand** and tap the pen on a stand card. **Manage Stands** lists each stand with its plots, acreage and sampling, with **Add Stand** at the bottom and **Fill Parcel** at the top. Tap a stand to select it, or a piece of a stand to promote or move it (section [3.9](#)).

Reassign Plots re-checks every plot that has a location and puts it in the stand that contains it. Plot data is never touched; only the stand each plot belongs to can change. Use it if plots seem to be in the wrong stand after a lot of boundary editing. **Densify** and **Weld** work as described in sections [3.11](#) and [3.5](#).



3.27 Manage Stands.

Without boundaries

If none of your stands has a boundary (and always in **Basic**), plots don't follow location, so you place them yourself:

- **Assign Plots**, in a stand's actions, lists every plot with its stand. Filter to **Unassigned**, sort by number, change stands, and tap **Save**. **Reset All** abandons the changes.
- **Move Plots to Another Stand** (Basic) lets you select plots in one stand and send them to another.

Plots that belong to no stand, for example after deleting a stand, are listed as **Unassigned** at the bottom of the Stands screen. Assign them as above, redraw a boundary around them, or tap **Delete These** to delete them for good. Reports leave unassigned plots out and say how many were left out ([Chapter 8](#)).

3.11 **Densifying stands** MAX

Densify adds plots to stands that already have some, without moving or deleting any. Use it when a stand turns out more variable than expected, or when a grid left a small stand with too few plots.

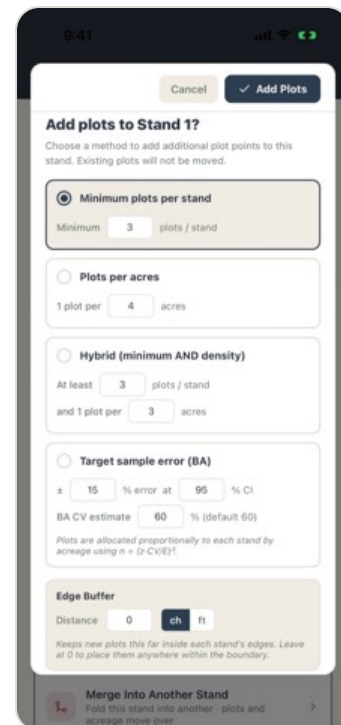
Tap **Densify This Stand Only** in a stand's actions, or **Densify All** on the Stands screen. Choose a method:

- **Minimum plots per stand.** Bring each stand up to at least this many.
- **Plots per acres.** One plot per this many acres.
- **Hybrid.** At least the minimum, and at least one per so many acres.
- **Target sample error (BA).** Enough plots for $\pm$ this percent error at the chosen confidence, using your estimate of the basal-area CV (the default is 60%).

Edge Buffer keeps new plots this far inside the stand edge. Tap **Add Plots**.

The app tells you how many plots it will add in how many stands, and which stands already meet the target, before it adds anything. New plots are numbered on from the existing ones.

Stands without a boundary are skipped.



3.28 Densify a stand.

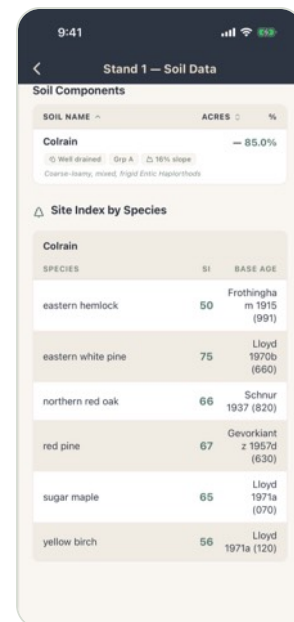
3.12 **NRCS soils** MAX

Forest Metrix can download the NRCS soil data for each stand. Tap **NRCS Soil Data** in a stand's actions, or **Fetch Soils** on the Stands screen to do every stand with a boundary at once. A connection is required; it can take a minute.

- **Soil Map Units** outlines the soil polygons over the stand. Tap the map to identify a unit. Maps are available for stands under 20,000 acres.
- **Soil Components** lists each soil series with its drainage, hydrologic group and slope, the acres and the share of the stand.
- **Site Index by Species** gives the NRCS site index for each species on each soil, with its base age and the curve it comes from.



3.29 Soil map units and components.



3.30 Site index by species.

Soils and site index carry through to the stand reports and the management plan. **Refresh Soil Data** fetches it again.

Refactor by Soil

Refactor by Soil, below the stand list, replaces your stands with one stand per soil series. The app downloads soils for the whole parcel if it hasn't yet, then tells you how many stands you have now, how many it will make, and that every plot will be reassigned by location. It warns you if the stands it replaces use different BAFs. Nothing changes until you confirm, and you can undo it straight afterwards.

THIS REPLACES YOUR STANDS

Refactor by Soil discards the stands you drew. Use it at the start of a project, or on a working copy ([Chapter 2](#)) if you want to compare.

Plots

Understand how plots are managed, add plots by hand, understand where plot locations come from, navigate to plots with the map, and bring in plots created elsewhere.

4.1 The Plots list

Tap **Plots** at the top of Project Home. The line at the top totals the project: *4 Stands · 33 Plots · 163 Trees · 32/33 tallied*, with a progress bar under it.

- **All Plots** lists every plot in number order.
- **By Stand** shows a card for each stand (forest type, acres, plot count and sampling) and lists the plots of the stand you tap. The pen on a card opens Manage Stands ([Chapter 3](#), section [3.10](#)); the trash deletes the stand.
- The amber chip near the top right shows how many plots aren't done yet. Tap it to put them at the top of the list; tap it again to go back.

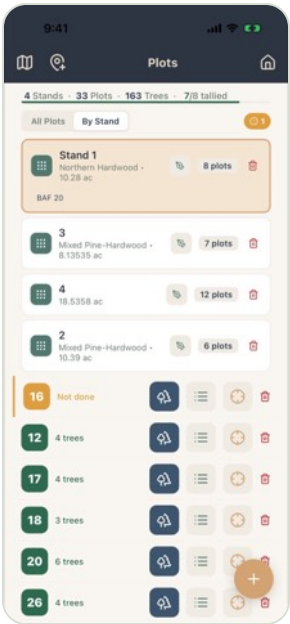
Each plot row has four buttons:

BUTTON	OPENS
Tree (dark)	The tally screen on this plot (Chapter 5).
Leaf	PRO The plot's observations: notes, photos, snags, regeneration and the rest (Chapter 6).
Target	PRO The map, with directions to this plot (section 4.5).
Trash	Deletes the plot (section 4.7).

Tap **+** at the bottom right to add a plot. A project with no plots shows **Get Started**, with buttons to add a stand or a plot.



4.1 All Plots.



4.2 By Stand, unfinished plots first.

4.2 Plot status

The plot number badge and the line beside it tell you where each plot stands:

YOU SEE	BADGE	MEANING
4 trees	Green	Trees have been tallied on the plot.
Zero tally	Green	The plot was visited and marked done with no trees in it. It counts, as zero, in every per-acre figure.
Not done	Amber	Nobody has tallied it yet.

You mark a plot done, including a zero tally, on the tally screen ([Chapter 5](#)). The *tallied* count at the top of the list and the progress bar count both kinds of finished plot. Plots that are still *Not done* (no trees, not marked done) are left out of reports rather than counted as empty.

4.3 Adding a plot

Most projects get their plots from a grid, a random layout or an import ([Chapter 3](#)). Add one by hand when you need an extra plot in the field, or when you cruise without a map.

1. On the Plots list, tap **+**.
2. **Plot Number** fills in with the next number after the highest plot in the project. Change it if your field sheet says otherwise; it must be a whole number.
3. **BAF** starts at the project's (or the stand's) BAF. Pick another, or type one under *Other*, for this plot only. The BAF choice only appears for variable-radius sampling; fixed-area and double-sampling plots use the project's settings. A stand with its own sampling shows a note saying so.
4. **Assign to Stand** starts at the stand you were last working in.
5. Open **Custom Plot Fields** to fill in any plot fields from your template ([Chapter 10](#)), and add **Notes** if you like.
6. Tap **Add Plot** or the check mark.

The new plot has no location yet. It gets one when you tally its first tree ([section 4.4](#)).

4.3 New Plot: the next number is 34.

Count and Measure plots

In a double-sampling project, New Plot starts with **Plot Type**. A **Measure Plot** takes full tree data at the measure BAF; a **Count Plot** takes species and, if you like, DBH at the count BAF. [Chapter 5](#) covers double sampling.

4.4 Plot locations

A plot's location is its plot center. The app uses it to guide you to the plot, to put the plot in the right stand, and to place it on maps and in exports.

Locations come from:

- **A grid, random layout or Densify** ([Chapter 3](#)). These are planned locations: where you intend to put the plot center.
- **An imported KML file** (section [4.6](#)).
- **GPS at the first tree**. When a plot has no location, the app records your GPS position as soon as you tally its first tree. A short overlay shows while it averages the readings. A plot that already has a location keeps it.
- **Dragging** on the boundary editor's map ([Chapter 3](#), section [3.3](#)).

AVERAGING

How many readings the app averages into a plot center is set under **Settings** > **GPS** > **Averaging samples**. Each sample adds about a second of standing still. More samples reduce random scatter, but no amount of averaging corrects the bias a heavy canopy causes. [Chapter 7](#) has more on GPS accuracy.

Trees can have their own GPS location too, if your template records it ([Chapter 5](#)).

4.5 Going to a plot PRO

Tap the target button on a plot row. The map opens with your position (the blue arrow) and the plots colored by completion, and a card at the bottom gives:

- **Distance** to the plot, in chains or feet as set in Settings.
- **Bearing** from you to the plot, in degrees and as a compass point.
- **Open Tally for Plot 16**, to start tallying as soon as you arrive.

The distance and bearing update as you walk. Tap × on the card to stop navigating.

You can also navigate from the map itself: tap any plot marker, then **Navigate** on its card. [Chapter 7](#) covers the map, offline maps and GPS in detail.



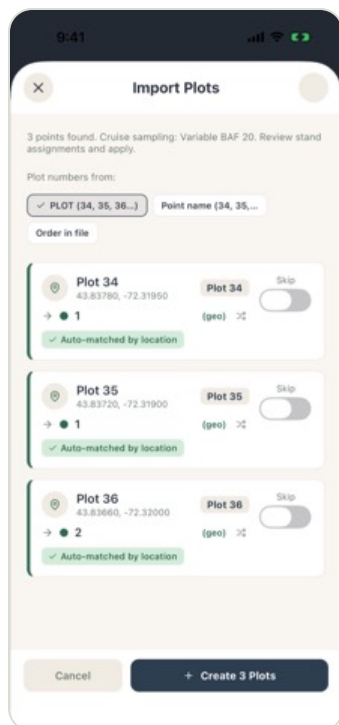
4.4 Plot 16 is 16.2 chains away, bearing 352°.

4.6 Importing plots

If you planned the plot layout in a GIS, Google Earth or another program, bring it in instead of laying out a new grid. Go to **Stands** and tap **Import Plots**, then pick a KML file with one point per plot.

1. **Plot numbers.** The app looks for the plot number in each point's name and in its attributes, including the attribute table that ArcGIS's *Layer to KML* writes. If one field holds a unique whole number on every point, it uses it. If more than one field could be the plot number and they disagree, it asks you to choose at the top of the list.
2. **Stands.** Each point goes into the stand it falls in. If the file has a stand field, it's used for points outside every stand boundary, but only to match a stand you already have; the import never creates stands. You can change any point's stand in the list.
3. **Skip** any point you don't want.
4. Tap apply. Points whose plot numbers already exist in the project are skipped, and the app tells you how many plots it added and how many it skipped.

Imported plots take the project's BAF. To import stand boundaries, see [Chapter 3](#), section [3.8](#).



4.5 Three plots from a KML, matched to their stands.

4.7 Deleting plots

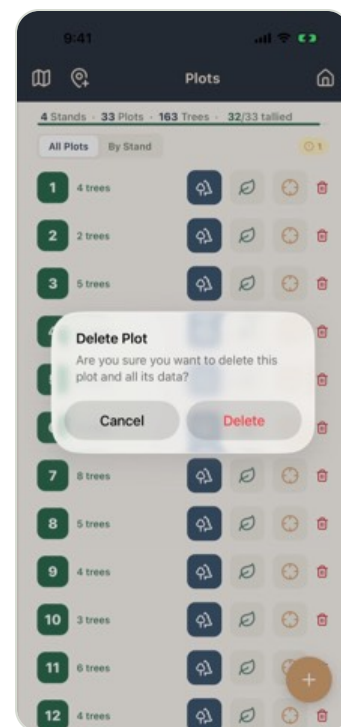
Tap the trash on a plot row and confirm **Delete**. The plot goes, and so does everything recorded on it: trees, observations, photos, snags, regeneration and the rest.

THERE IS CONFIRMATION, BUT THERE IS NO UNDO

A deleted plot is deleted on every device once it syncs. If you might want it back, make a working copy of the project first ([Chapter 2](#), section [2.4](#)).

Other ways plots are removed:

- **Deleting a stand** keeps its plots. They become unassigned ([Chapter 3](#), section [3.10](#)).
- **Unassigned plots** can be deleted together with **Delete These** at the bottom of the Stands screen.
- **Creating a grid** on a project that already has plots replaces all of them ([Chapter 3](#), section [3.4](#)).



4.6 Deleting a plot.

Numbers aren't closed up after a delete: deleting plot 12 leaves a gap. New plots continue from the highest number left.

Tallying trees

Tally trees by plot or as a 100% inventory: species, DBH, any fields you track, then the products up the stem. This chapter covers each tally method, the optional fields, the limiting-distance calculator, double sampling, 100% tallies, Voice Tally and finishing a plot.

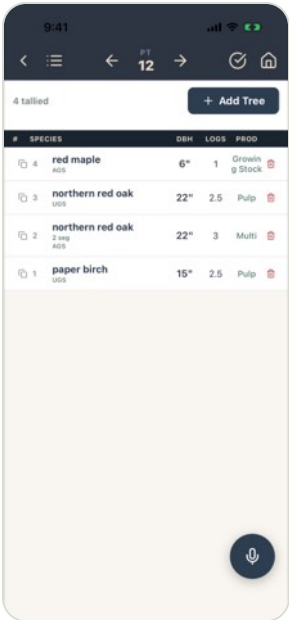
5.1 The tally screen

Open a plot’s tally from the tree button on the Plots list (Chapter 4), from a plot on the map, or from **Open Tally** when you arrive at a plot.

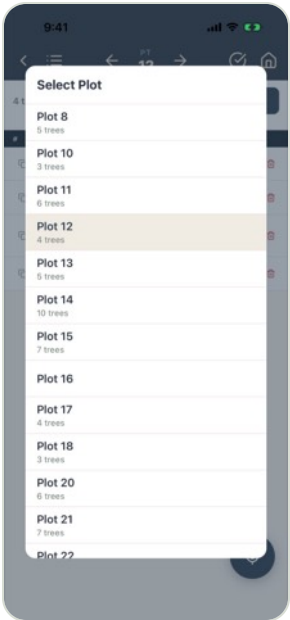
Along the top bar, left to right:

BUTTON	WHAT IT DOES
<	Back to the Plots list.
≡	The plot’s observations: notes, photos, snags, regeneration and the rest (Chapter 6).
← PT 12 →	Previous plot, this plot’s number, next plot. Tap the number for Select Plot , which lists every plot that isn’t done with its tree count.
#	The Pulp Clicker, if you turned it on (section 5.11).
✓	Mark the plot done, or reopen it (section 5.13). It turns green when the plot is done.
🏠	Project Home.

Below the bar: how many trees are tallied, **Add Tree** , and the tree list: tree number, species (with any field answers, such as AGS), DBH, logs and product. *Multi* means the tree has more than one product. The microphone at the bottom right is Voice Tally (section 5.12).



5.1 Plot 12, ready for the next tree.



5.2 Tap the plot number to jump to another plot.

Leaving a plot that isn't marked done asks **Is this tally complete?** **Yes** marks it done; **No** leaves it open. Plots with trees count in reports either way; a plot with *no* trees counts only if it's marked done (section [5.13](#)).

5.2 Choosing a tally method

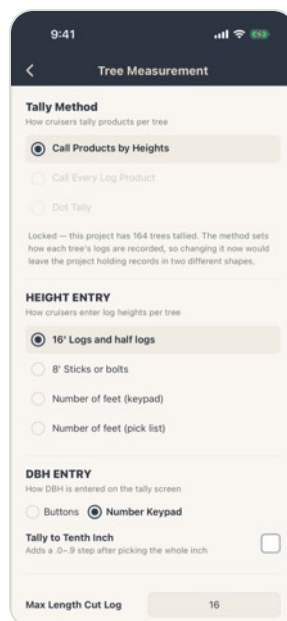
How you record products is set under **Settings** ›

Tree Measurement Method :

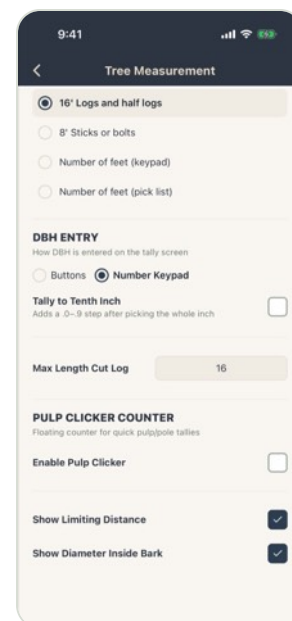
- **Call Products by Heights.** Call a product and its height, then the next product up the stem, up to 6 per tree. The most common choice (section [5.3](#)).
- **Call Every Log Product.** Every log is the same length, 8' or 16', and you call a product for each, up to 12 logs (section [5.4](#)).
- **Dot Tally.** Tap a DBH × height cell for each tree, one product per species. The fastest method, without per-tree detail (section [5.10](#)). Not available with double sampling.

LOCKED ONCE YOU START

As soon as a project has a tallied tree, its tally method and height entry are locked, so a project never holds trees recorded two ways. Choose before the first tree; the setting comes from your template ([Chapter 10](#)).



5.3 The method is locked once trees are tallied.



5.4 DBH entry and the other options.

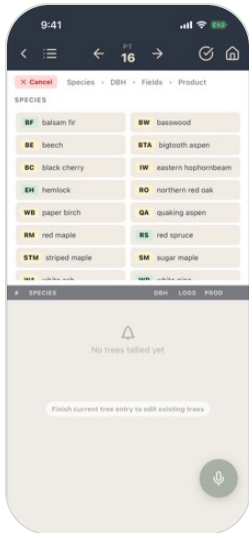
The same screen sets:

- **Entry Order** (products by heights): *Length, then product* (the default for new templates) or *Product, then length*.
- **Height Entry** (products by heights): 16' logs and half logs, 8' sticks or bolts, feet on a keypad, or feet from a pick list you can edit.
- **DBH Entry:** **Buttons** (5" to 40" by default; tap the list to edit it) or a **Number Keypad** . **Tally to Tenth Inch** adds a .0–.9 step after the whole inch.
- **Max Length Cut Log:** the longest log the volume engine cuts a call into. A 40' sawlog call at 16 becomes 16 + 16 + 8.

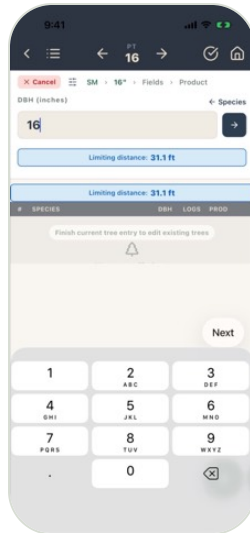
- **Pulp Clicker** (section [5.11](#)), **Show Limiting Distance** (section [5.7](#)) and **Show Diameter Inside Bark**, which shows the DIB at the top of each call while you tally.

5.3 Entering a tree: products by heights

Tap **Add Tree**. The entry panel steps you through the tree, and the trail at the top (*Species* › *DBH* › *Fields* › *Product*) shows where you are. Tap **← Species**, **← DBH** and so on to go back a step.



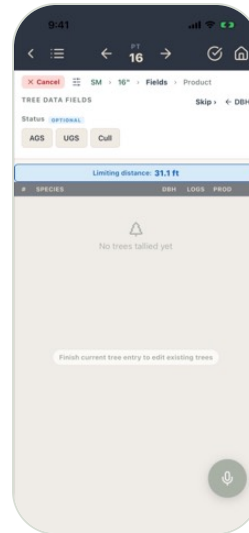
5.5 Species.



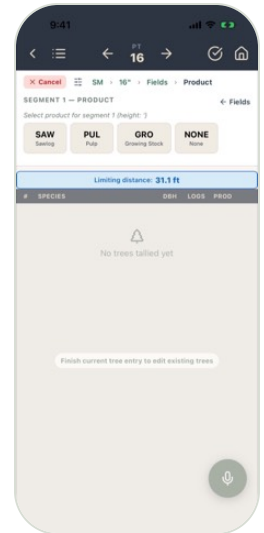
5.6 DBH on the keypad.



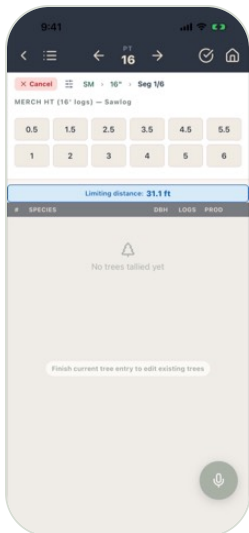
5.7 DBH as buttons.



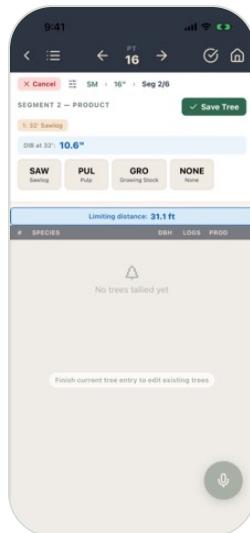
5.8 Your tree fields.



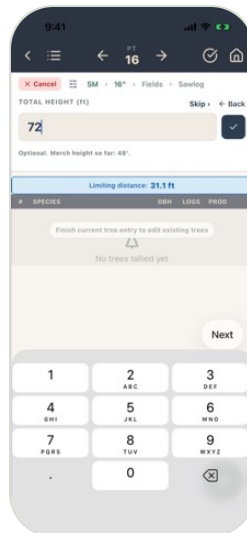
5.9 First product.



5.10 Its height, in logs.



5.11 The next product up.



5.12 Total height.

1. **Species.** Tap it in your pick list. The list comes from **Settings** › **Tree Species** ; species saved to the top come first ([Chapter 10](#)).
2. **DBH.** Tap a button, or type it and tap the green arrow. With tenths turned on, pick the tenth next.
3. **Tree data fields.** Your custom fields, each marked *Required* or *Optional*. Tap an answer to move on, or **Skip** › past optional ones. The step is skipped when you have no fields.
4. **Product.** Pick the first product from the butt: sawlog, pulp, growing stock, or *None* for a tree with no merchantable product (it counts for stocking, with no volume). Products that don't meet your product specifications for this species and diameter are greyed out or flagged ([Chapter 10](#)).
5. **Height.** The length of that product, in your height units. 2 means two 16' logs.
6. **The next product.** The panel now shows what you've called so far (*1: 32' Sawlog*) and the diameter inside bark at the top of it. Call the next product up the stem and its height, or tap **Save Tree** if that was the last.
7. **Total height**, if you turned it on (section [5.6](#)). Type it, or tap **Skip** › .

The tree joins the list and the panel is ready for the next one. Each saved tree gives a short vibration and a beep; turn sounds off under **Settings** › **Other** .

To abandon a tree part-way, tap **X Cancel** . The app asks **Discard Tree?** : **Keep Entering** or **Discard** . The tree list is locked while you're entering a tree.

GPS

The first tree on a plot that has no location records the plot's GPS position ([Chapter 4](#), section [4.4](#)).

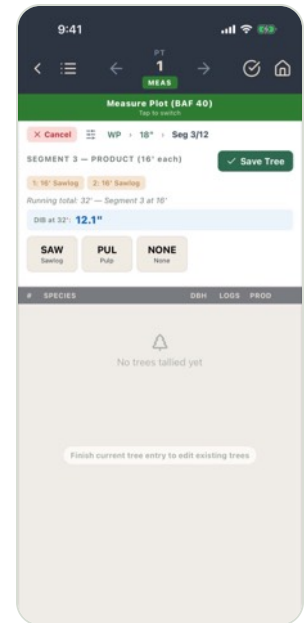
5.4 Call Every Log Product

With **Call Every Log Product**, every segment is the same length, 16' or 8' as chosen in the settings, and you name the product of each one from the butt up. There's no height to enter: each tap is one more log.

- The trail shows *Seg 3/12*: the segment you're on and the most a tree can have.
- *Running total: 32'* and the DIB at that height help you judge where the merchantable top is.
- Tap **Save Tree** after the last log.



5.13 8' or 16' logs.



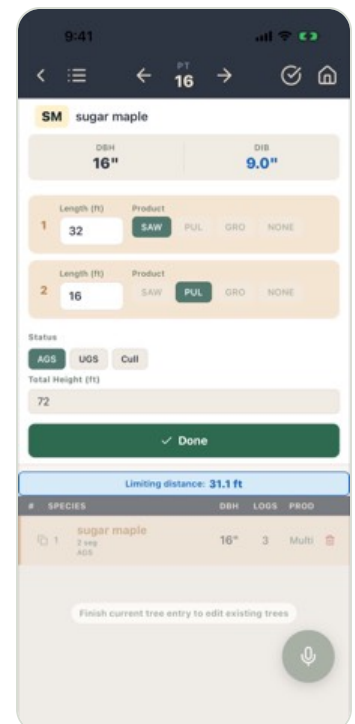
5.14 Two sawlogs called, choosing the third log.

5.5 Editing and deleting trees

Tap a tree in the list to open it. You can change its species, DBH, each segment's length and product, field answers, total height and the other optional fields. DBH and the computed DIB are shown at the top. Tap **Done** to save.

To delete a tree, tap the red trash at the end of its row and confirm.

Volumes are recalculated as soon as you save. A project shared with you may be read-only; editing then needs the owner's permission ([Chapter 12](#)).



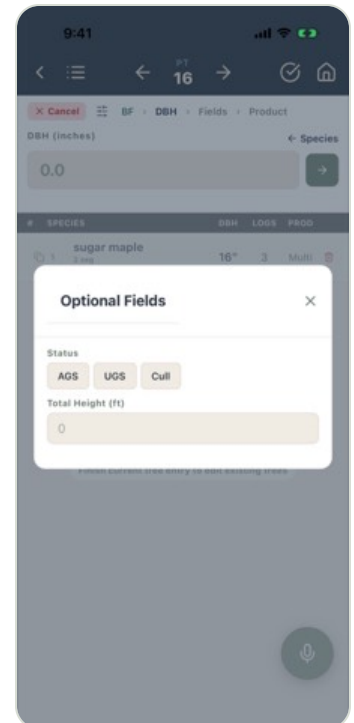
5.15 Editing a tree.

5.6 Optional tree fields PRO

Beyond species, DBH and products, a tree can carry:

- **Your custom fields**, such as crown class, AGS/UGS or a damage code, set up under **Settings** > **Custom Tree Data**. Each is On (asked, can be skipped) or Required (the tree can't be finished without it). Basic includes one field.
- **Defect**: a type and an amount, taken off the volume.
- **Total height**: On asks once per tree with **Skip**; Required holds every save until it's entered. Total height is required when the Clark & Souter or Behre's hyperbola taper model is selected; choosing one of them sets this to **Required**.
- **Manual tree number**, for trees you've tagged. You only need it when you assign tree numbers, such as for CFI plots or a high-value timber sale.

During an entry, the  icon beside **Cancel** opens **Optional Fields**, so you can fill in anything you skipped without leaving the tree.



5.16 Optional fields mid-entry.

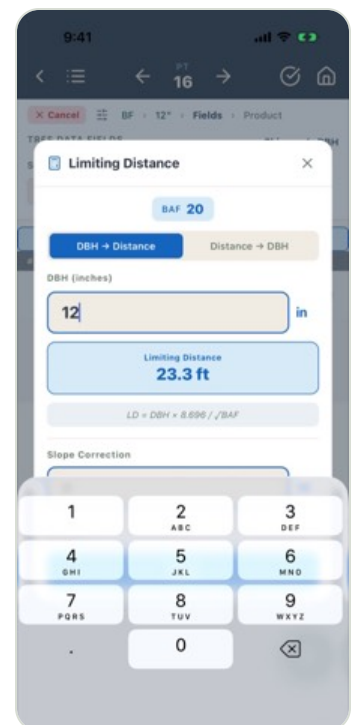
5.7 Limiting distance

On variable-radius plots, a blue bar shows the limiting distance for the DBH you just entered: *Limiting distance: 23.3 ft* for a 12" tree at BAF 20. A tree farther from plot center than that is out.

Tap the bar to open the calculator:

- **DBH → Distance**: the limiting distance for a DBH.
- **Distance → DBH**: the smallest DBH that is *in* at a distance you measured.
- **Slope Correction**: enter the slope in percent to correct a slope distance.

The formula is shown under the result. Whether you measure to the tree's center or its face is set under **Settings** > **Other** > *Target Reference*. Turn the bar off with **Show Limiting Distance**.



5.17 A 12" tree at BAF 20 is in within 23.3 ft.

5.8 Double sampling

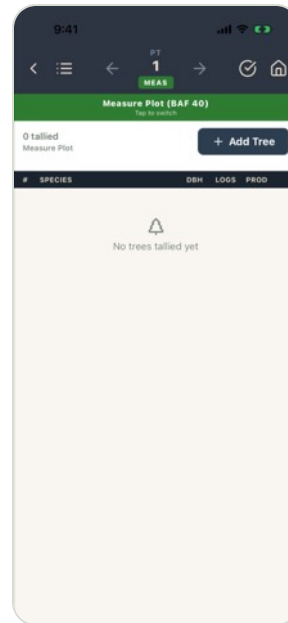
Double sampling (Big BAF, or count-and-measure) tallies many plots quickly and measures fully on a few. Volume per unit of basal area from the measured trees is applied to the counted basal area. Choose **Double Plot / Big BAF** as the sampling method in New Project or Edit Project and set:

- **Plot-Based:** whole plots are count plots or measure plots. **Tree-Based:** on every plot, some trees are counted and some measured.
- **Measure BAF and Count BAF.**

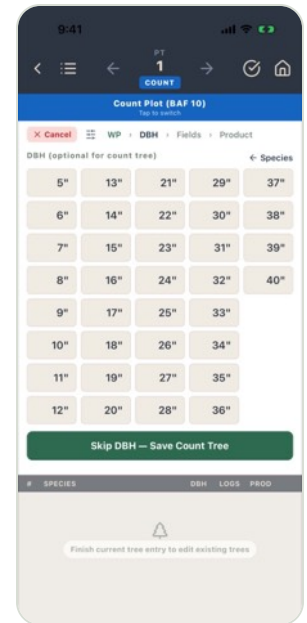
On the tally screen a banner shows the plot's type:

Measure Plot (BAF 40) in green or **Count Plot (BAF 10)** in blue. Tap the banner to switch. A measure plot takes full trees. A count plot takes the species and, if you like, the DBH: tap **Skip DBH — Save Count Tree** to record species only.

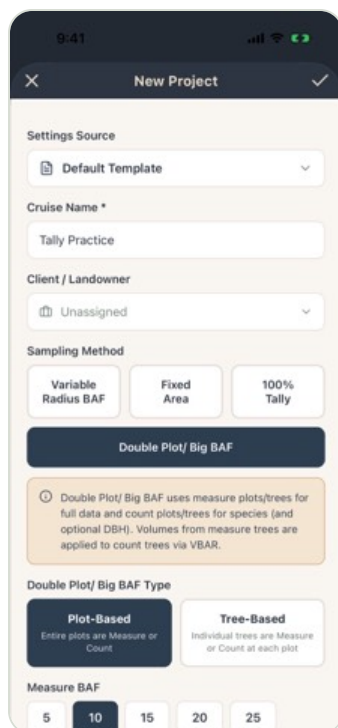
When selected, double sampling is applied to all stands. Dot Tally isn't available with it.



5.18 A measure plot.



5.19 On a count plot, DBH is optional.

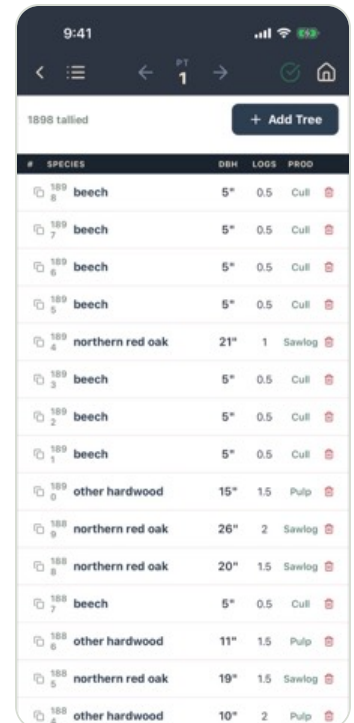


5.20 Setting up double sampling.

5.9 100% tally

In a 100% tally every tree in the stand is recorded, so there's no BAF, no plot radius and no limiting distance. Choose **100% Tally** as the sampling method for the project or for one stand (Chapter 3, section 3.9), and enter the stand's acres: per-acre values are total trees ÷ acres.

- You can tally everything on one plot or split the work across several plots (by crew, by day). The results are the same.
- No sampling error is reported, because nothing was sampled.
- Make sure the stand has acres. Without them, reports can't give per-acre figures and will say so.



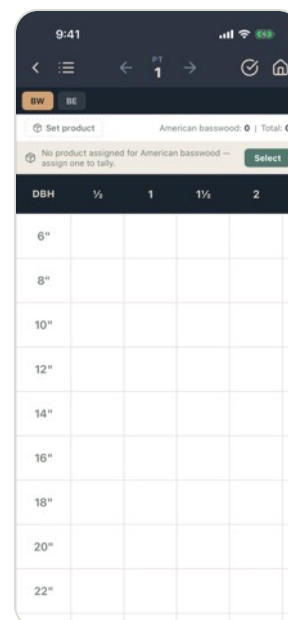
#	SPECIES	DBH	LOGS	PROD
1898	beech	5"	0.5	Cull
1897	beech	5"	0.5	Cull
1896	beech	5"	0.5	Cull
1895	beech	5"	0.5	Cull
1894	northern red oak	21"	1	Sawlog
1893	beech	5"	0.5	Cull
1892	beech	5"	0.5	Cull
1891	beech	5"	0.5	Cull
1890	other hardwood	15"	1.5	Pulp
1889	northern red oak	26"	2	Sawlog
1888	northern red oak	20"	1.5	Sawlog
1887	beech	5"	0.5	Cull
1886	other hardwood	11"	1.5	Pulp
1885	northern red oak	19"	1.5	Sawlog
1884	other hardwood	10"	2	Pulp

5.21 A 100% tally: 1,898 trees on one plot.

5.10 Dot Tally

Dot Tally replaces the step-by-step panel with a grid for the species you pick at the top: DBH classes down the side, heights across the top. Tap a cell once to add a tree; touch and hold a cell to remove one. The number in the cell is the count. Use it for fast inventory where you don't need each tree's fields.

- **One product per species.** Before a species takes trees, choose its product: tap **Select** on the yellow notice, or the product box above the grid. Once a species has dots on a plot, its product is locked for that plot; clear its dots to change it.
- **Settings** (Tree Measurement Method): *DBH Increment* 1" or 2"; *Height Type* half logs, full logs, 5' or 10' steps; *Min DBH*; and *Max Length Cut Log*, which sets the length of one log column.
- Pinch to zoom the grid. The counts at the top show this species' trees and the plot total.



5.22 Choose the species' product first.



5.23 Two trees dotted.

Every dot is saved as a tree with that species, DBH, height and product, so reports treat it like any other tree.

KEEP THE PICK LIST SHORT

Every species in your pick list gets a tab above the grid. Keep the list to the species you actually tally ([Chapter 10](#)). You can use an “Other” species as a catch-all for less important or non-commercial species.

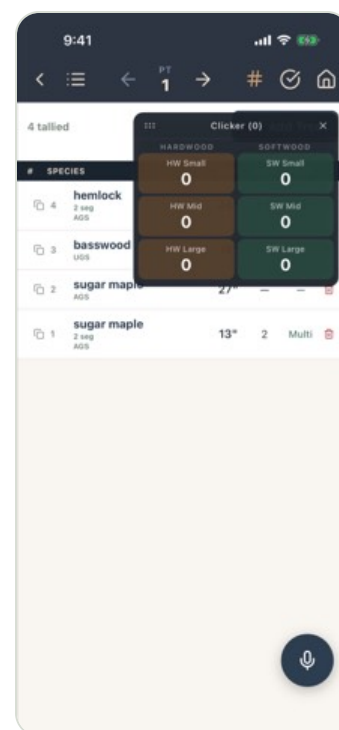
5.11 Pulp Clicker

The Pulp Clicker counts pulpwood stems with one tap each. Turn it on under

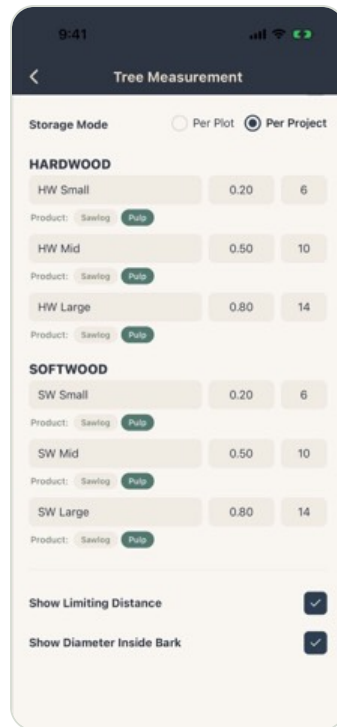
Settings › **Tree Measurement Method** › **Enable Pulp Clicker**, and the **#** button appears on the tally bar.

- Six counters: *Small*, *Mid* and *Large* for hardwood and for softwood.
- Each counter has a label, a volume per stem (the first number, in the product’s unit), a representative DBH (the second number) and a product, all set below **Enable Pulp Clicker**.
- Each click adds a tree with that volume, counted in reports like any other tree.
- **Storage Mode**: counts kept *Per Plot* or *Per Project*.

Drag the popover by its handle; tap × to close it.



5.24 The Pulp Clicker.



5.25 Clicker settings: label, volume per stem, DBH, product.

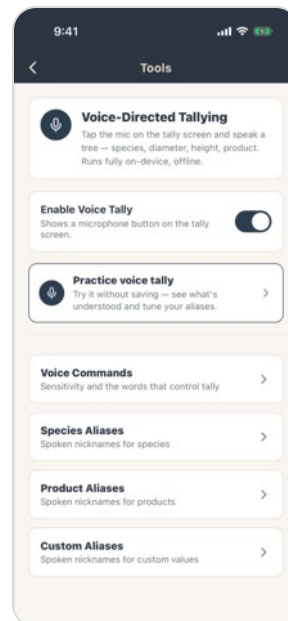
5.12 Voice Tally MAX

Voice Tally lets you speak a tree instead of tapping it. Speech is recognized on the phone, so it works offline. Turn it on under **Settings** > **Voice Tally**; a microphone button appears on the tally screen.

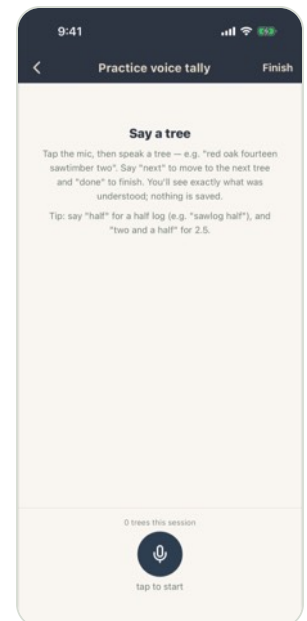
1. Tap the microphone.
2. Say the tree: species, diameter, then products and heights. For example, “*red oak fourteen sawtimber two*”. Say *half* for a half log (“*sawlog half*”, “*two and a half*”).
3. Finish with a command word. “*Next*” saves the tree and keeps listening; “*done*” saves it and stops; “*cancel*” throws it away and starts again.

A banner shows what was recorded, with an **Undo** button. Anything it couldn’t understand is left for you to finish by tapping.

- **Voice Commands:** how sensitive the listening is, and your own words for next, done and cancel.



5.26 Voice Tally settings.



5.27 Practice without saving.

- **Species, Product and Custom Aliases:** nicknames you say for species (*“hard maple”*), products and field answers.
- **Practice voice tally:** try it without saving anything. It shows what it heard and how it understood each part, and suggests aliases for words it missed.

5.13 Finishing a plot

When the last tree is in, tap ✓ on the tally bar. Before marking the plot done, the app checks every tree and lists up to five problems under

Validation Issues: a product without a height, or a required field left blank, for example. Tap **Fix Now** to go back to the trees, or **Continue Anyway**.

- **Zero tally.** A plot with no trees in it is still a plot: mark it done so it counts as zero in per-acre figures. It shows a **Zero Tally Plot** banner, and *Zero tally* on the Plots list.
- **Reopen** a finished plot by tapping ✓ again.
- **Leaving unfinished.** Moving to another plot or leaving the tally screen from a plot that isn’t done asks **Is this tally complete?** (section [5.1](#)).

WHAT COUNTS IN REPORTS

A plot counts when it has trees or is marked done. A plot with no trees that isn’t marked done is treated as not yet visited and left out.

Plot data

Setting up non-timber data: photos, notes, regeneration, snags, coarse woody material, and the custom fields, checklists and tables you need.

6.1 The Observations screen

Each plot has an Observations screen. Open it from:

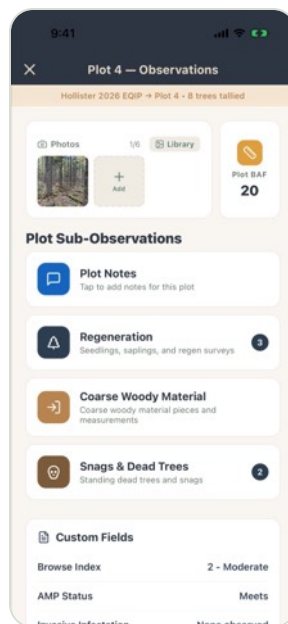
- the ≡ button on a plot row in the Plots list **PRO**, or
- the ≡ button on the tally bar, while you tally the plot.

The banner gives the project, the plot and its tree count.

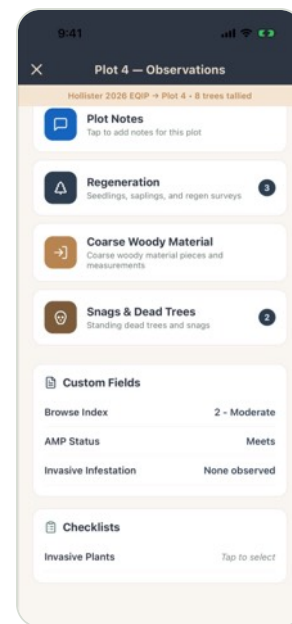
Below it:

- **Photos** and the **Plot BAF** card (sections [6.2](#) and [6.3](#)).
- **Plot Sub-Observations:** Plot Notes, Regeneration, Coarse Woody Material and Snags & Dead Trees, each with a count of entries. Which ones appear depends on your settings (section [6.9](#)).
- **Custom Fields, Checklists and Tables**, if you've set any up **PRO**.

Tap × to go back. Everything saves as you go.



6.1 Plot 4's observations.



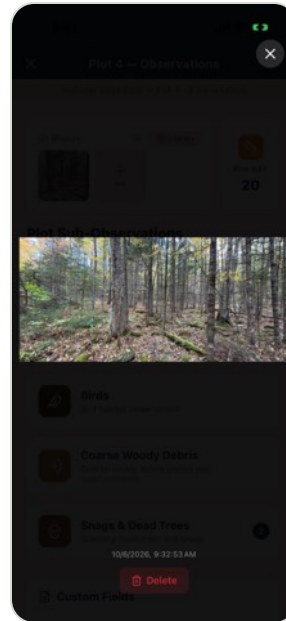
6.2 Custom fields and a checklist.

6.2 Plot photos

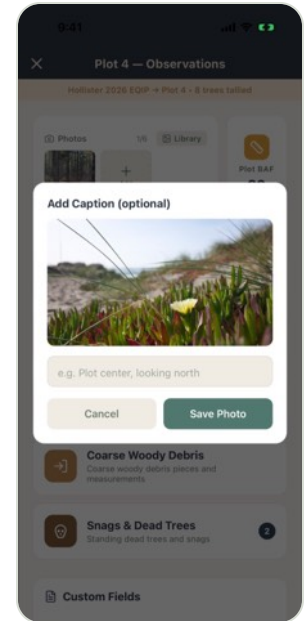
A plot can hold photos: a view from plot center, a damage example, canopy closure. The count beside **Photos** shows how many there are.

- **+ Add** opens the field camera. The first time, it asks for camera access. It shows a live clinometer while you frame the shot. After you take it, turn on **Stamp location on photo** to print the coordinates, altitude, bearing, slope and time in a small box in the corner; the app remembers your choice. Photos from the library can't be stamped.
- **Library** adds photos you already took.
- Add an optional caption, such as “*Plot center, looking north*”, and tap **Save Photo**.
- Tap a thumbnail to see the photo full size with its date. **Delete** removes it.

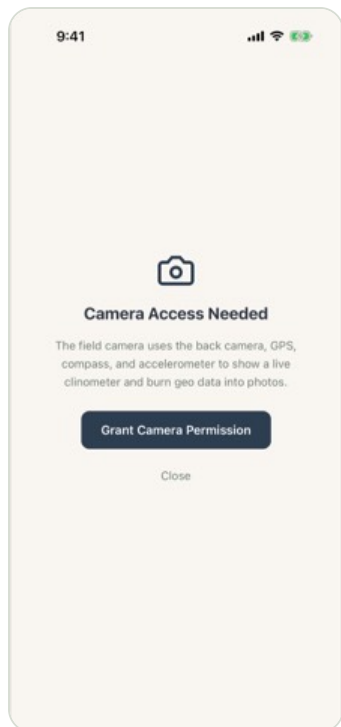
Photos are stored on the phone first and upload when you have a connection, then appear in the office and on your other devices. Photo size, saving a copy to your camera roll, and Wi-Fi-only uploading are under **Settings** > **Photos** ([Chapter 11](#)). To export a project's photos, see [Chapter 9](#).



6.3 A plot photo.



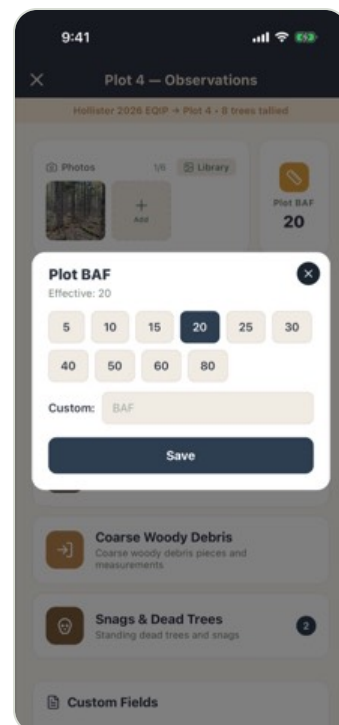
6.4 Add a caption.



6.5 The field camera asks for access once.

6.3 Plot BAF

On variable-radius projects, the Plot BAF card shows the BAF used for this plot. Normally that's the project's or the stand's. If you want to switch BAF for individual plots, tap the card, choose the BAF (or type one under *Custom*) and tap **Save**. *Effective* shows the BAF the plot's trees are expanded with. Reset it to go back to the default.

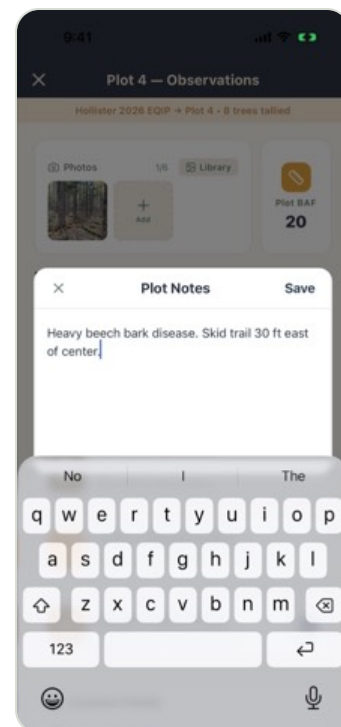


6.6 One plot's BAF.

6.4 Plot notes

Tap **Plot Notes** to type anything about the plot: conditions, landmarks, a skid trail to avoid. Tap **Save**, or × to leave without saving. A saved note shows on the Plot Notes row and in the plot data reports and exports.

For a project-wide note, use Project Notes on Project Home ([Chapter 2](#)).



6.7 Plot notes.

6.5 Regeneration **PRO**

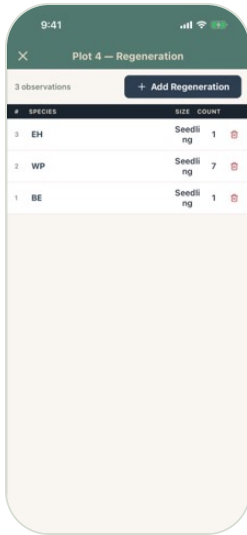
Regeneration tallies seedlings and saplings on a small plot at plot center, sized in the regeneration settings (section [6.9](#)). Tap **Regeneration**, then

Add Regeneration :

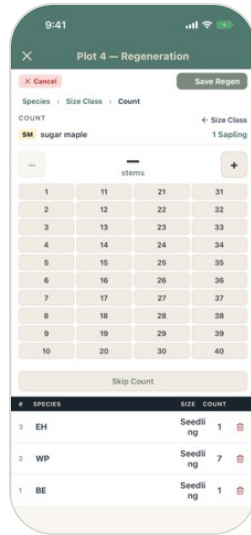
1. **Species**.
2. **Size Class** (stem diameter): Seedling, <1" sapling, then 1", 2", 3" and 4" saplings. Or **Skip Size Class**.
3. **Count**: how many stems of that species and size. Tap a number, or use – and + for larger counts. Or **Skip Count**.
4. Tap **Save Regen**.

Each entry is a line in the list. Tap one to edit it, or the trash to delete it.

X Cancel drops an entry you're partway through. Reports convert the counts to stems per acre using the plot size for each class.



6.8 Three entries.



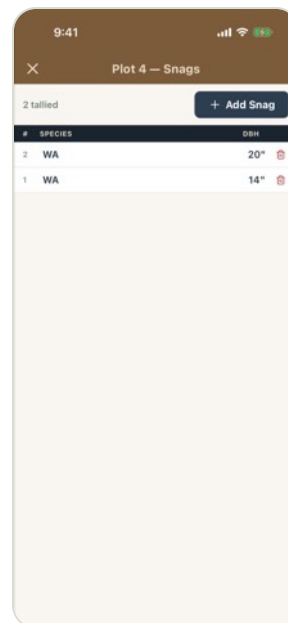
6.9 Count for 1" sugar maple saplings.

6.6 Snags and dead trees PRO

Snags are standing dead trees, tallied for wildlife habitat and stand health. They have their own sampling (a BAF or a fixed plot, set in section [6.9](#)) and are kept out of live-tree volume.

1. Tap **Snags & Dead Trees**, then **Add Snag**.
2. Pick the species, then the DBH, or **Skip DBH**.
3. Answer any snag fields you set up, such as decay class or cavity. Each can be skipped.

The snag is added to the list. Tap one to edit it; the trash deletes it.



6.10 Two snags.



6.11 Snag DBH.

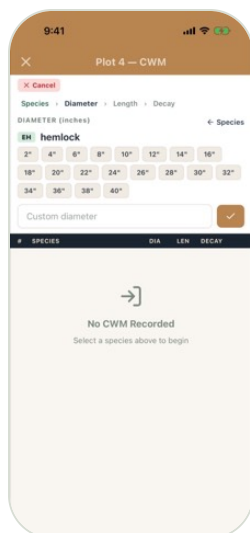
6.7 Coarse Woody Material PRO

Coarse woody material (CWM, also called coarse woody debris) is dead wood on the ground. Tap **Coarse Woody Material**, then **Add Piece**:

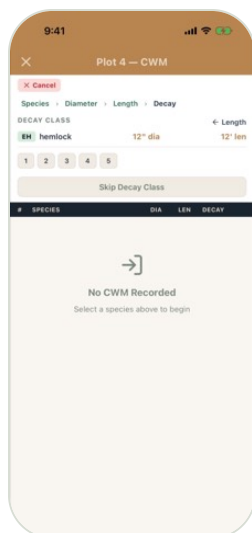
1. **Species**.
2. **Diameter** in inches: tap a size, or type one under *Custom diameter*.
3. **Length** in feet, or **Skip Length**.
4. **Decay class** 1 to 5, if you record decay, or **Skip Decay Class**.

The list shows each piece's species, diameter, length and decay class.

Depending on your settings, CWM is sampled on a fixed plot, a variable-radius plot or a transect, and can use size classes instead of measured diameters (section 6.9).



6.12 Diameter.



6.13 Decay class.

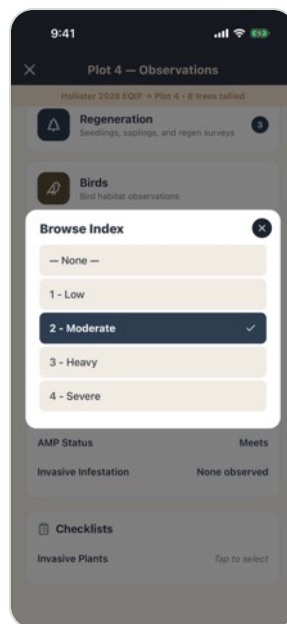
6.8 Custom fields, checklists and tables

PRO

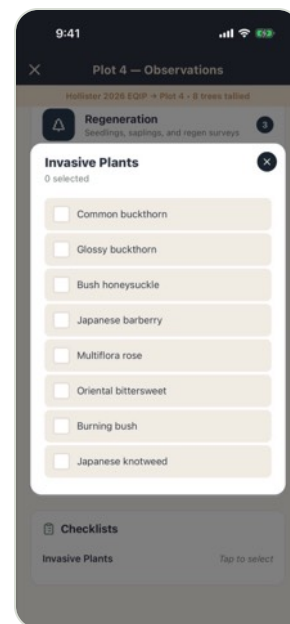
The bottom of the Observations screen holds plot data you define yourself (section 6.9):

- **Custom Fields** take one answer each: a choice from a pick list (with — None — to clear it) or free text. For example, *Browse Index: 2 - Moderate*.
- **Checklists** take any number of answers, such as every invasive plant present. Tap the row, tick the items, and close.
- **Tables** hold several records per plot, each with up to six fields: a list of stumps, say, or a transect's observations. Tap **Add** to add a record; a table with none says *No records yet*.

Answers appear in the plot data reports and exports, and on the Office pages.



6.14 A pick-list field.



6.15 A checklist.

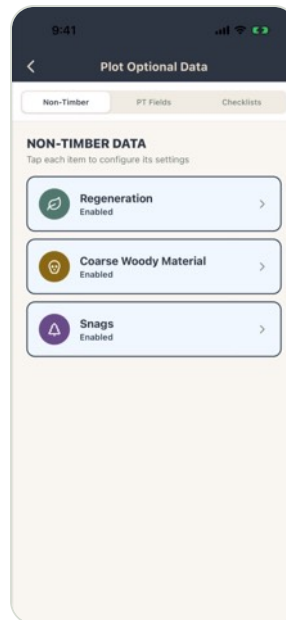
6.9 Setting up plot data

What appears on the Observations screen is set under **Settings** › **Plot Optional Data** . Like the other project settings, it comes from your template and can be changed per project ([Chapter 10](#)). It has three tabs.

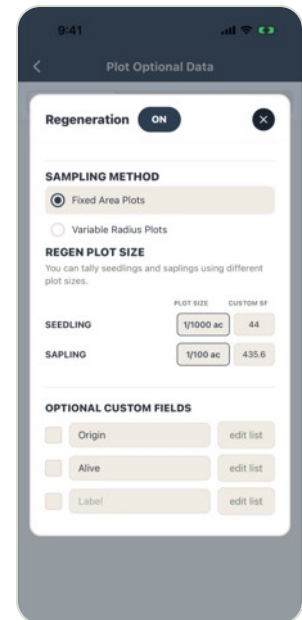
Non-Timber

Turn Regeneration, Coarse Woody Material and Snags on or off, and tap each to set it up:

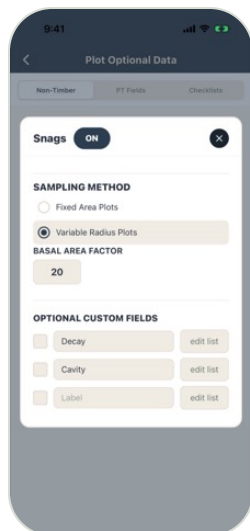
- **Regeneration:** fixed-area or variable-radius sampling. For fixed area, a plot size for seedlings and one for saplings (for example 1/1000 acre and 1/100 acre). Up to three custom fields, such as origin.
- **Snags:** fixed-area or variable-radius sampling and its BAF or plot size; up to three custom fields, such as decay or cavity. Tick a field to use it, and tap **edit list** for its answers.
- **Coarse Woody Material:** fixed-area, variable-radius or transect sampling and its size; measured diameters or size classes; whether to record decay class, and the class list; custom fields.



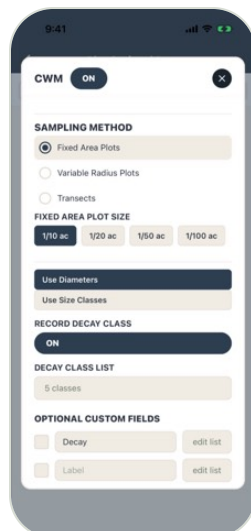
6.16 Non-Timber data.



6.17 Regeneration settings.



6.18 Snag settings.



6.19 Coarse woody material settings.

PT Fields

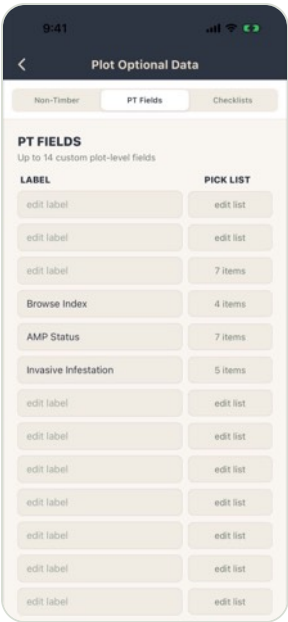
Up to 14 plot fields. Type a label, and tap **edit list** to give it answers to pick from; leave the list empty for free text. The label is what turns a field on: a field with a list but no label stays hidden, and the screen says so under it.

Checklists

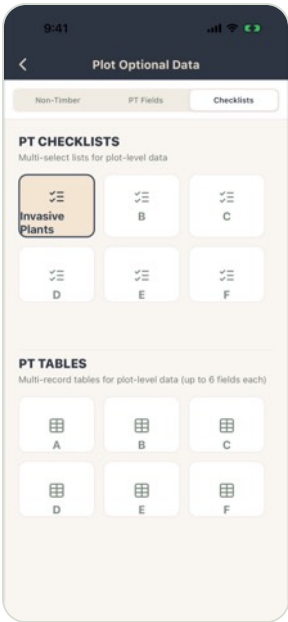
Up to six checklists (A to F), each a list of items to tick, and up to six tables (A to F), each with up to six fields per record.

CHANGE THE SETUP BEFORE FIELDWORK

Changing or removing fields partway through a project can leave earlier answers under an old heading, or hide them. Set these up in your template before beginning the project.



6.20 Plot fields.



6.21 Checklists and tables.

Maps, GPS and offline

Navigate around the property with the project map, mark waypoints, record tracks, and download maps to the phone before you lose signal.

Mapping and GPS tools are part of Pro and Max. For planning in the office, the same map opens in a web browser.

7.1 The project map PRO

Tap **Map** at the top of Project Home. The map shows the project boundary, the stands in their colors, the numbered plots, and your position as a blue arrow pointing in the direction the device points.

- **Top left:** the layers menu (section [7.2](#)), add a waypoint (section [7.4](#)), and start or stop a track (section [7.5](#)).
- **Top right:** back to Project Home.
- **Map source:** **Cache** uses the map saved on the phone, **Custom** your imported map, and **Live** downloads as you go (section [7.7](#)).
- **Bottom right:** point the map north, follow your position, and fit the whole property on the screen.

Pinch to zoom, drag to pan, and twist with two fingers to rotate.

PLANNING? USE A COMPUTER

The phone map is for finding your way in the woods. For laying out the job (boundaries, stands, moving plots), open the project at app.forestmetrix.com on a computer instead (section [7.10](#) and [Chapter 3](#)).



7.1 The project map.

7.2 Layers and basemaps

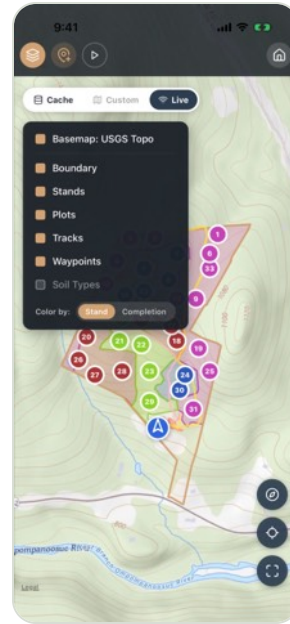
Tap the layers button at the top left. Tick what you want to see:

- **Boundary, Stands and Plots.**
- **Tracks:** the paths you've recorded.
- **Waypoints.**
- **Soil Types** **MAX** (section 7.6).

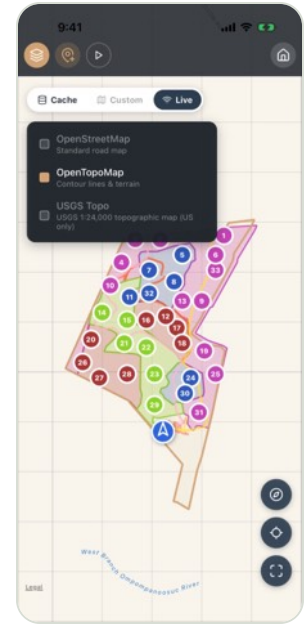
Color by colors plots by **Stand**, or by **Completion**: green for plots that are done, red for those still to do.

Tap **Basemap** to choose the map underneath:

- **OpenStreetMap:** a standard road map.
- **OpenTopoMap:** contour lines and terrain.
- **USGS Topo:** the USGS 1:24,000 topographic map, US only.



7.2 The layers menu.



7.3 Basemaps.

7.3 Plots on the map

Tap a plot marker. A card shows the plot number, its tree count and how far away it is.

- **Navigate** guides you with live distance and bearing (Chapter 4, section 4.5). When you get close, the phone can play a tone; set the distance under **Settings** > **GPS** > *Navigation alerts*.
- **Tally** opens the plot's tally screen.

To move a plot, use the boundary editor's Edit Plots mode (Chapter 3, section 3.3).



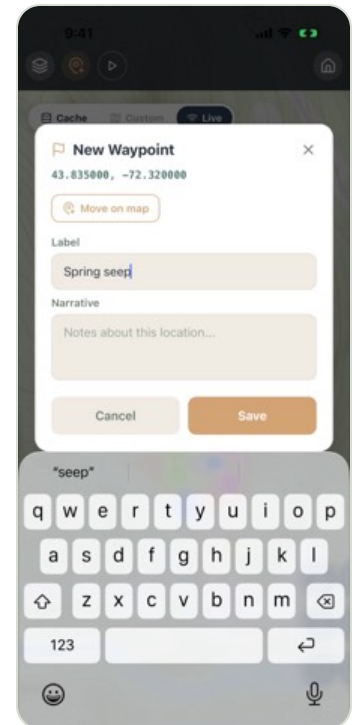
7.4 Plot 8 is 21.6 chains away.

7.4 Waypoints

Waypoints mark anything worth finding again: a corner pin, a spring, a stand of invasives, a culvert.

1. Tap the waypoint button (the pin with a +) on the map, or on Project Home.
2. The app records your position, averaging several readings if you've set that up (section [7.9](#)). The coordinates show at the top.
3. To put it somewhere else, tap **Move on map** and tap the spot.
4. Give it a **Label** and, if you like, a **Narrative**. Tap **Save**.

Tap a waypoint on the map to see, edit or delete it. Waypoints appear in the KML and map exports ([Chapter 9](#)).



7.5 A new waypoint.

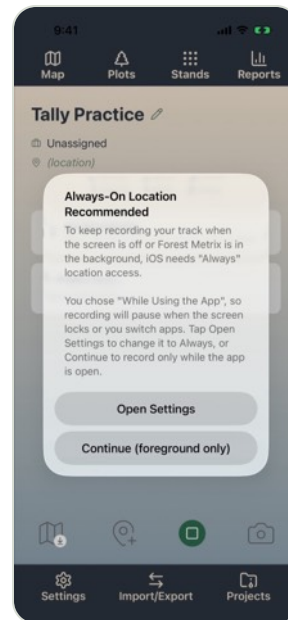
7.5 Recording a track

A track records the path you walk: a boundary you followed, the route to a landing, or proof of where the crew went. Tap the ▷ button on Project Home or the map to start; it turns into a stop button while recording, and the map header says *Recording...*. Tap it again to stop. Tracks show on the map and export with the project.

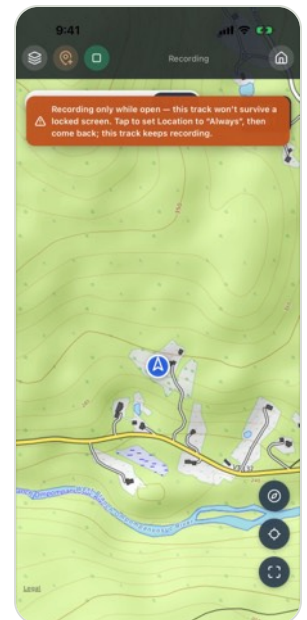
Let it record with the screen off: iPhone and iPad

To keep recording when the phone is locked or in your pocket, iOS needs the app's location access set to **Always**. The first time you start a track, iOS asks. If you choose *Keep Only While Using*, the app explains what that means and offers [Open Settings](#).

While recording with “While Using” access, an orange banner says the track stops when the screen locks. Tap it to open Settings, set Location to *Always*, and come back; the track keeps going.



7.6 Why the app asks for “Always”.



7.7 Recording with “While Using” access.

Let it record with the screen off: Android

On Android, a track keeps recording in the background when location access is set to **Allow all the time**. The first time you start a track:

1. Android asks for location access. Allow it; without it, no track starts.
2. Android then asks for location *all the time*. On newer phones this opens the app's location settings; choose **Allow all the time**. If you keep *While using the app*, the app explains and offers [Open Location Settings](#) or [Continue \(foreground only\)](#). It asks again each time you start a track until background access is allowed.
3. Allow **notifications**. While a track records in the background, Android shows a notification, *Forest Metrix GPS Track · Recording GPS track in background...*; without it, Android stops the recording when you leave the app.
4. The app may then ask to **keep GPS recording alive** by letting it run without battery restrictions. Some phones stop background apps to save battery and cut tracks short, so tap [Allow](#). You can check this later under [Settings](#) > [GPS](#).

As on iPhone, recording with *While using the app* shows an orange banner on the map; tap it, allow **All the time**, and come back, and the same walk keeps recording.

How often a track records a point, and how accurately, is set under **Settings** › **GPS** (section 7.9).

7.6 Soil types **MAX**

Tick **Soil Types** in the layers menu to draw the NRCS soil map units over the property, colored by soil with a legend. The first time, the app downloads the soils for the boundary and each stand: *Fetching NRCS soil 0/4*. Afterwards they're stored with the project and work offline.

If the download doesn't finish, the banner reads

Tap to load soil outlines from NRCS; tap it to try again. The NRCS service needs a connection and is sometimes down for maintenance.

Soil components and site index for each stand are on the stand's

NRCS Soil Data screen ([Chapter 3](#), section 3.12).



7.8 The soil layer, with its legend.

7.7 Working offline

Forest Metrix is built for places with no signal. Your project data is always on the phone. The map is saved independently, and you need a connection to download it once.

- **Data:** everything you enter is saved on the phone first and uploads when you're back in coverage ([Chapter 12](#)).
- **Maps:** the map for the project area is saved when you open the project's **Map**, when you tap the map icon at the bottom of Project Home, and when you draw or change the boundary on this phone. The map icon shows a check mark when the map is saved; until then it shows a download arrow. On the map, **Cache** shows the saved map.

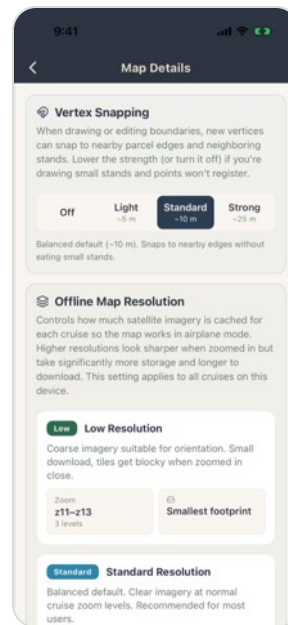
BEFORE YOU HEAD OUT

While you still have Wi-Fi, open each project you'll cruise and tap the map icon at the bottom of Project Home (or open its Map). Wait for the check mark. If you didn't download a project's map in advance and don't have a cell connection, you won't have a map in the woods.

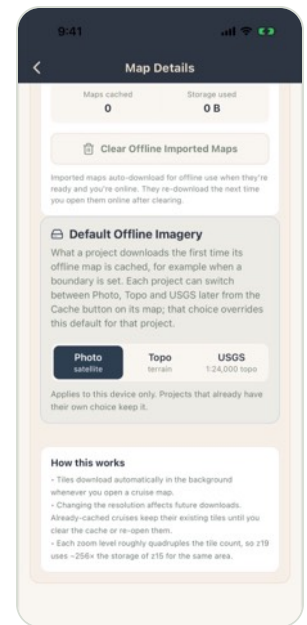
Map Details

Settings > **Map Detail** controls the offline maps:

- **Vertex Snapping:** how strongly new corners snap to nearby parcel edges and stands when you draw (Off, Light, Standard, Strong).
- **Offline Map Resolution:** Low, Standard, High or Maximum. Higher levels look sharper when zoomed in but take longer to download and more storage. Standard suits most users.
- **Storage:** how much the saved maps use, and buttons to clear them. Imported PDF maps are counted separately.
- **Default Offline Imagery:** **Photo** (satellite), **Topo** or **USGS** (1:24,000), for projects that haven't chosen yet.



7.9 Map Details.



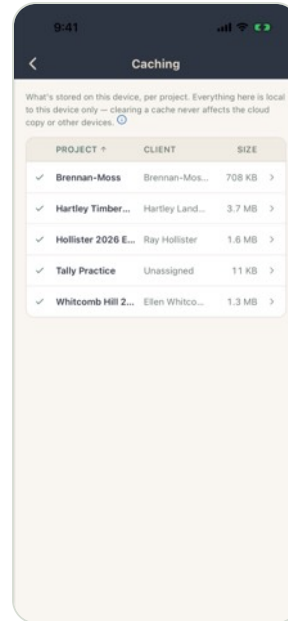
7.10 Default offline imagery.

Caching

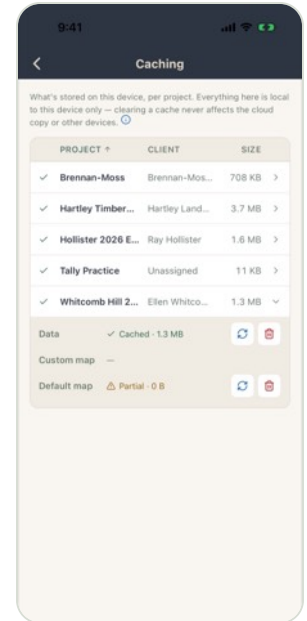
Settings > **Caching** lists every project on the phone with its client and how much storage it uses. Tap a project to see:

- **Data:** cached or not, and its size.
- **Custom map:** your imported map, if any.
- **Default map:** the saved map tiles: *Cached*, *Partial* or not saved.

The ↺ button downloads again; the trash clears that part. Clearing a cache only affects this phone. The project stays in the cloud and on your other devices.



7.11 What's stored on this phone.



7.12 One project's caches.

7.8 Your own maps MAX

You can bring in your own map and use it in the field, offline:

- A **georeferenced PDF** (a GeoPDF, up to 100 MB), such as a forest-management-plan map or a county map.
- **USGS topo quads**, which can be downloaded for individual projects (section [9.6](#)).

Import them from **Import/Export** on Project Home ([Chapter 9](#)). Then choose **Custom** above the map to switch to it. Your position, plots and boundary draw on top as usual.

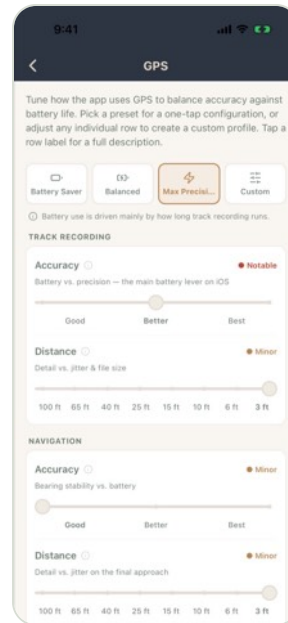
7.9 GPS settings and accuracy

Settings > **GPS** trades accuracy for battery. Pick a preset:

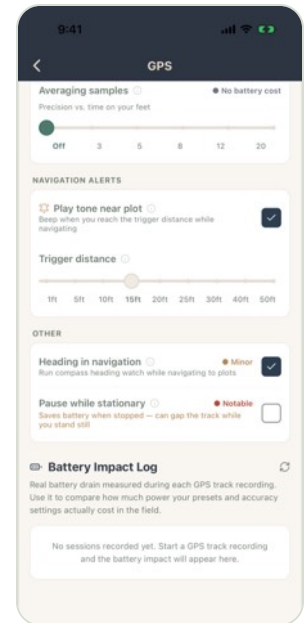
- **Battery Saver:** for long days with lots of tracking.
- **Balanced.**
- **Max Precision** (the default): the highest accuracy, with the highest battery cost.

Changing any slider makes your own *Custom* profile. Each row shows its battery cost: none, minor or notable. Tap a row's label for a full description.

- **Track Recording and Navigation:** accuracy, and how often or how far apart points are recorded.
- **Waypoint Capture > Averaging samples:** how many readings are averaged for each waypoint and plot center: Off, 3, 5, 8, 12 or 20. Each adds about a second of standing still. Averaging reduces scatter but can't correct the bias a heavy canopy causes. This setting isn't changed by the presets.
- **Navigation Alerts:** play a tone near the plot, and at what distance.
- **Heading in navigation** and **Pause while stationary** (saves battery when you stop, but leaves a gap in the track).
- **Battery Impact Log:** how fast the battery actually drained during each recording, to compare settings.



7.13 GPS presets and track settings.



7.14 Averaging and alerts.

GETTING GOOD POSITIONS

Let the phone see the sky for a moment before you capture a plot center. Hold it away from your body, and wait for the blue arrow to settle. Under a dense canopy, expect errors of tens of feet whatever the settings.

7.10 The map on a computer

Everything in this chapter that doesn't need you to be standing in the woods also works in a web browser. Go to app.forestmetrix.com on your computer,

sign in with your usual login, open the project and click **Map** .



7.15 The project map in a browser.

IN THE BROWSER	PHONE ONLY
The boundary, stands and plots, colored by stand or completion	Your position and the direction you face
The layers menu. The basemap starts on satellite imagery with road names	Recording a track (section 7.5)
Waypoints: click the map to place one, then label it	Navigating to a plot (section 7.3)
Your own imported maps, under Custom	Offline maps: the browser needs a connection (section 7.7)

Use the browser to plan: check the layout against the imagery, see which plots are still red on the completion colors, and mark landings, crossings or a corner pin you found on a survey as waypoints. Then move plots and redraw boundaries in the editors ([Chapter 3](#)), which are easier with a mouse than a fingertip.

BACK TO THE PHONE

Changes you make in the browser save to the cloud straight away. Open the project on the phone while it still has a connection, and it picks up the changes within about a minute. Then save its map (section [7.7](#)). The phone doesn't re-save a map it already has, so if you expanded your boundary significantly, download the map again: **Settings** › **Caching** , tap the project, then ↺ next to the map (section [7.7](#)).

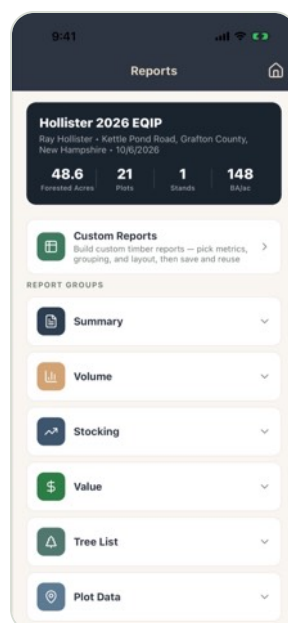
Reports and statistics

Evaluate the data: volume and value by product and species, stocking and stand density, sampling statistics, and ecological reports. Every report can be customized, printed, shared or exported.

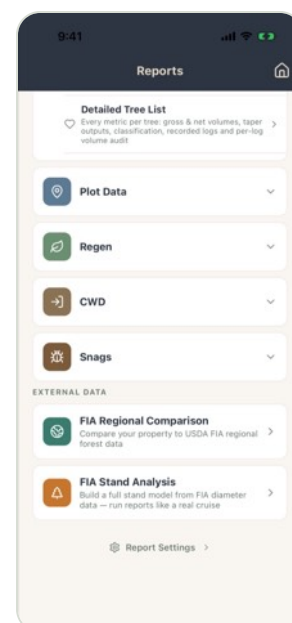
8.1 The Reports screen

Tap **Reports** at the top of Project Home. The card at the top sums up the project: forested acres, plots, stands and basal area per acre.

- **Favorites:** tap the ♥ beside any report to pin it to the top.
- **Custom Reports** **PRO**: build your own tables (section [8.10](#)).
- **Report groups:** Summary, Volume, Stocking, Value, Tree List, Plot Data, Regen, CWM and Snags. Tap a group to open it, then tap a report. Regen, CWM and Snags appear only when you collect that data.
- **External Data** **PRO**: comparisons with USDA Forest Service FIA data (section [8.11](#)).
- **Report Settings** at the bottom (section [8.12](#)).



8.1 The Reports screen.



8.2 More groups, FIA data and settings.

Reports are worked out on the phone from the data on it, so they work offline and update the moment you change a tree.

Every report can also be previewed in the web app at app.forestmetrix.com, on a bigger screen.

BANNERS

A banner at the top of a report warns you about anything that changes the numbers: products without a volume rule, plots outside every stand, a 100% tally stand with no acres, or a species without taper coefficients. Most banners open the screen where you can fix the cause.

8.2 Tract or stand, and weighting

Most reports start with the same controls:

- **Tract** reports the whole property; **Stand** lets you pick one stand from a row of chips.
- **By Acreage** weights each stand by its acreage when combining them into tract figures, the usual choice. **Equal Weight** averages every plot equally regardless of stand.
- **Products shown** chips turn products on and off in the report.
- **Scale or Volume scale:** **Acre** for per-acre figures, **Total** for the whole tract or stand.

The line under the controls confirms what you're looking at, for example *Tract — 48.59 ac (forested)*. Non-forested stands are left out of the acreage ([Chapter 3](#), section [3.9](#)).

8.3 Summary reports

- **Project Overview:** the project's details; plot count, method, BAF, trees and forested acres; basal area, trees per acre, QMD and average merchantable height; a species table with hardwood and softwood subtotals; and the *Volume Summary* per acre in board feet, cords, cubic feet and tons.
- **Summary Charts:** basal area, trees per acre and volume as charts.
- **Sampling Analysis:** for basal area, trees per acre and volume: the mean, standard deviation, coefficient of variation, sampling error, confidence limits, and how many more plots you'd need to reach your sampling-error goal.

The confidence level (68%, 80%, 90%, 95% or 99%) and the sampling-error goal are set under **Settings** > **Other** ([Chapter 11](#)). Sampling error uses Student's *t* for your number of plots.

9:41 Reports

Project Overview

Tract — 48.59 ac (forested)

Hollister 2026 EQIP
Ray Hollister • Kettle Pond Road, Grafton County, New Hampshire
10/6/2026

POINTS	METHOD	BAF	TREES	FORESTED ACRES
21	Variable	20	155	48.6

BAF	TPA	QMD	Avg MHT
147.6	255	10.3"	28'

VOLUME SCALE

Acre Total

SPECIES	BAF	TPA	QMD	MHT
red maple	23.8	48	9.6	26
yellow birch	15.2	35	8.9	22
northern red oak	12.4	16	12.1	28
white ash	11.4	22	9.7	28
sugar maple	8.6	14	10.8	27
paper birch	5.7	6	13.0	26

Print Share CSV

8.3 Project Overview.

9:41 Reports

Project Overview

Tract — 48.59 ac (forested)

Hollister 2026 EQIP
Ray Hollister • Kettle Pond Road, Grafton County, New Hampshire
10/6/2026

SPECIES	BAF	TPA	QMD	MHT
paper birch	5.7	6	13.0	26
beech	1.9	5	8.4	18
quaking aspen	1.0	1	18.0	48
eastern hophornbeam	1.0	3	8.0	—
Hardwood	81.0	148	—	2
hemlock	37.1	50	11.6	30
white pine	18.1	15	14.7	41
balsam fir	11.4	41	7.2	30
Softwood	66.7	106	—	4
TOTAL	147.6	255	—	6

* Supplementary total match volume — not the expected product yield

HW 55% SW 45%

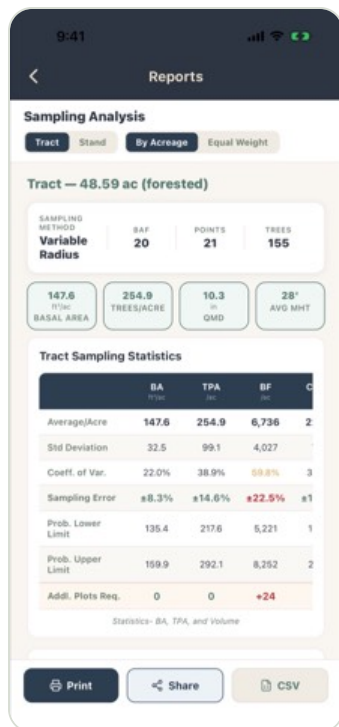
Volume Summary

BAF	TPA	QMD	MHT
6,736	22.38	5,066	75.71

Average & Grand - Int'l 14" rule - Net of defect
* Supplementary total match volume

Print Share CSV

8.4 The volume summary.

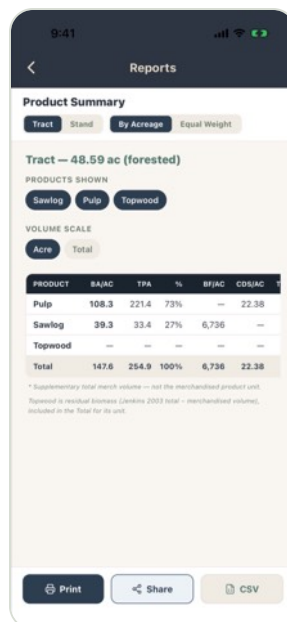


8.5 Sampling Analysis: $\pm 22.5\%$ on board feet; 24 more plots to reach the goal.

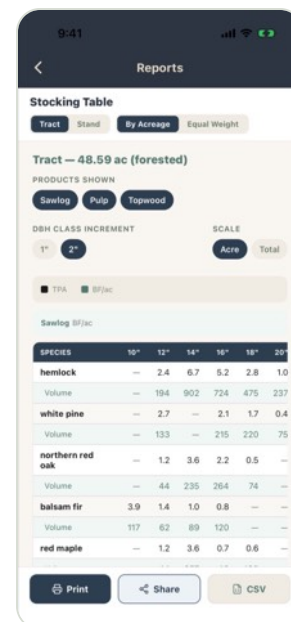
8.4 Volume reports

- **Product Summary:** basal area, trees per acre and volume for each product.
- **Stocking Table:** trees per acre and volume by species and DBH class, with the product breakdown. Choose 1" or 2" classes.
- **Stocking Table (Dynamic) and Products by Species (Dynamic):** the same ideas, laid out the way you choose.
- **Biomass and Carbon:** whole-tree green tons by species (Jenkins 2003), split into roots, bole and branches/foilage.
- **Contribution Trace:** a diagnostic showing how every tree's volume becomes the per-acre total.

Volume comes from each product's volume rule and the project's taper model, set under **Settings** > **Products** (Chapter 10). *Topwood* is the wood above your products, from biomass equations.



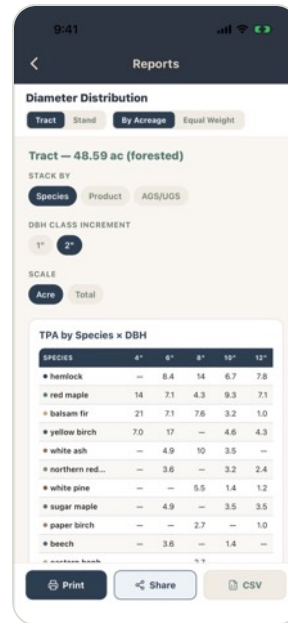
8.6 Product Summary.



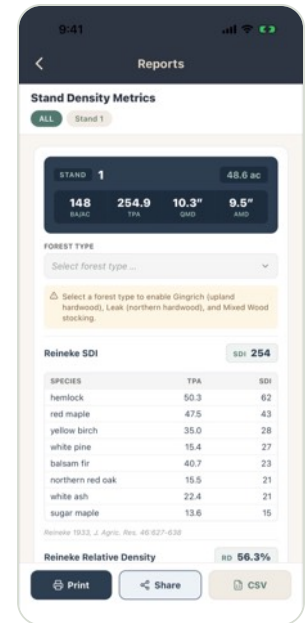
8.7 Stocking Table.

8.5 Stocking reports

- **Diameter Distribution:** trees per acre by species and DBH class. *Stack* by species, product, or a custom tree field such as AGS/UGS.
- **Stocking Graph:** a stacked bar chart lined up over the DBH table.
- **Stand Density Metrics:** for each stand, Reineke's stand density index, relative density, and stocking percent on the Gingrich (upland hardwoods and oaks) or Leak (northern hardwood) guide. Choose the stand's forest type to switch on the stocking guide. The *AMD* shown is the arithmetic mean diameter, using the DBH cutoff you choose.
- **Stand Table by Size Class:** trees per acre by size class.
- **Per-Plot BA Values:** each plot's basal area, with a distribution chart.
- **Q-factor curves** PRO: compare the diameter distribution with a target q for uneven-aged management.



8.8 Diameter Distribution.

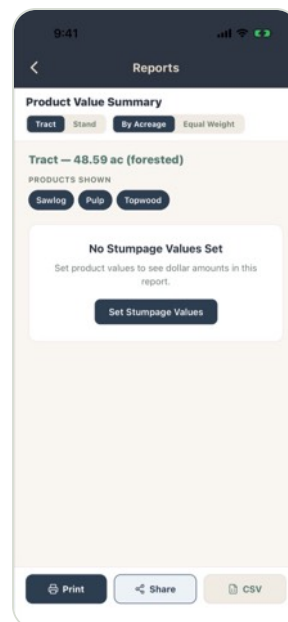


8.9 Stand density: SDI 254.

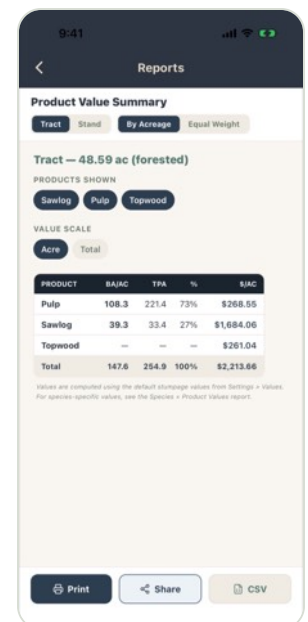
8.6 Value reports

- **Product Value Summary:** dollar value per acre (or in total) by product.
- **Species x Product Values:** value for each species and product, with row and column totals.
- **Species Product Value (Dynamic).**

Values come from your stumpage prices under Settings > Values: a default price per product, and optional prices per species ([Chapter 10](#)). Until you enter prices, the value reports say *No Stumpage Values Set* with a button to set them.



8.10 Before prices are entered.



8.11 \$2,213.66 per acre.

8.7 Tree lists and plot data

- **Complete Tree List:** every tree with its stand, plot, tree number, species, DBH, fields, height, product, defect and volumes. *Column visibility* chips (ID, Measures, Expansion, Volume, Taper, Segments, Notes) choose what's shown. Scroll sideways for more columns.
- **Detailed Tree List:** every number for every tree: gross and net volumes, taper results, classification, and each log's volume, for checking the math.
- **Plot Observations:** per plot: timber figures, notes, ecological observations, coordinates and counts.
- **Custom Plot Data and Custom Plot Data Summary:** your plot fields, checklists and tables, plot by plot and summarized ([Chapter 6](#)).

9:41 Reports

Complete Tree List

Tract — 48.59 ac (forested)

COLUMN VISIBILITY

ID Measures Expansion Volume Taper Segments Notes

155 trees • 21 plots • Variable Radius • Scroll →

STAND	PLOT	TREE	SPP	NAME	DBH	AGS/UGS	HGT
1	3	8	WP	white...	16.0	AGS	48
1	3	3	RM	red m...	12.0	UGS	24
1	3	6	RM	red m...	12.0	UGS	24
1	3	2	WP	white...	17.0	AGS	48
1	3	7	BP	balsa...	10.0	AGS	32
1	3	1	WP	white...	20.0	AGS	48
1	3	5	WP	white...	24.0	AGS	80
1	3	4	WP	white...	26.0	AGS	80
1	4	3	BP	balsa...	5.0	AGS	—
1	4	5	BP	balsa...	7.0	AGS	—
1	4	6	WA	white...	9.0	AGS	—
1	4	1	BP	balsa...	11.0	AGS	16
1	4	8	BP	balsa...	8.0	UGS	—
1	4	4	WP	white...	30.0	UGS	—
1	4	2	WA	white...	14.0	UGS	8
1	4	7	BP	balsa...	5.0	AGS	—
1	5	2	RM	red m...	10.0	AGS	24
1	5	1	RM	red m...	11.0	UGS	32

Print Share CSV

8.12 The tree list.

8.8 Regeneration, CWM and snags

- **Regen Summary:** seedlings and saplings per acre by species and size class, using each class's plot size.
- **CWM Summary and CWM by Species:** pieces and volume of down wood, by species and decay class.
- **Snag Summary and Snags by Species:** snags per acre, average DBH and decay classes.

These groups appear only when the data is turned on under Plot Optional Data ([Chapter 6](#), section [6.9](#)).

9:41 Reports

Regen Summary

Tract — 48.59 ac (forested)

Regeneration Stems/Acre by Species × Size Class

SPECIES	SEEDLING <1 SAPLING	1 SAPLING	2 SA
white pine	377	—	4.8
beech	283	—	9.5
northern red oak	189	—	—
hemlock	47	—	—
balsam fir	—	—	4.8
red maple	—	—	4.8
sugar maple	—	—	9.5
TOTAL STEMS/AC	896	—	33

Print Share CSV

8.13 Regeneration per acre.

8.9 Printing and sharing reports

Every report has three buttons at the bottom:

- **Print** : print it, or save it as a PDF from the print screen. The PDF carries your report style, logo and footer (section [8.12](#)).
- **Share** : send the report as a web page by email, Messages, AirDrop or any app.
- **CSV** : the report's table as a spreadsheet file.

The printed, shared and spreadsheet versions show the same numbers as the screen. Whole-project exports (an Excel workbook of all the data, map files and photos) are in [Chapter 9](#).

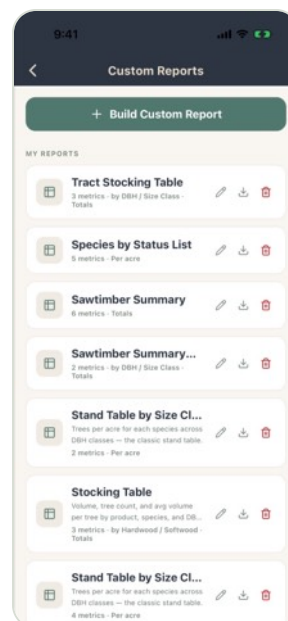
8.10 Custom reports PRO

When none of the standard reports are laid out the way you need, build your own. Tap **Custom Reports**. This is much easier on the web, where you have a larger screen and can see changes happen on the reports immediately when you adjust options.

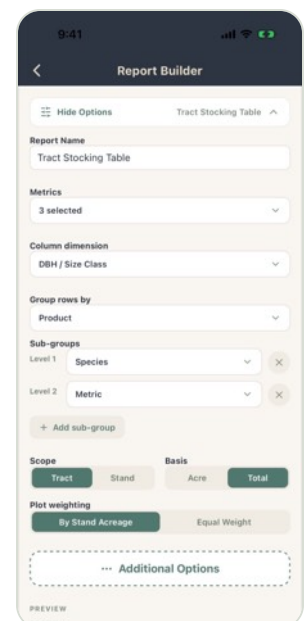
- **My Reports** lists your saved reports. Tap one to open it,  to edit,  to export, or the trash to delete. **Starter Reports** are ready-made ones to copy. **Import Report** brings in one someone shared with you.
- Tap **+ Build Custom Report** to start a new one.

In the builder, tap **Options** to set:

- **Report Name** and **Metrics**: what goes in the cells, such as volume, trees, basal area or average volume. Pick several, and reorder them.
- **Column dimension**: what goes across, such as DBH class, product or species.
- **Group rows by**, with up to two levels of **Sub-groups**.
- **Scope** (tract or stand), **Basis** (per acre or total) and **Plot weighting**.
- **Additional Options** : volume unit; DBH classes by 1" or 2" steps or your own groups (for example pole, small saw, large saw); and filters by DBH range, hardwood or softwood, and product.

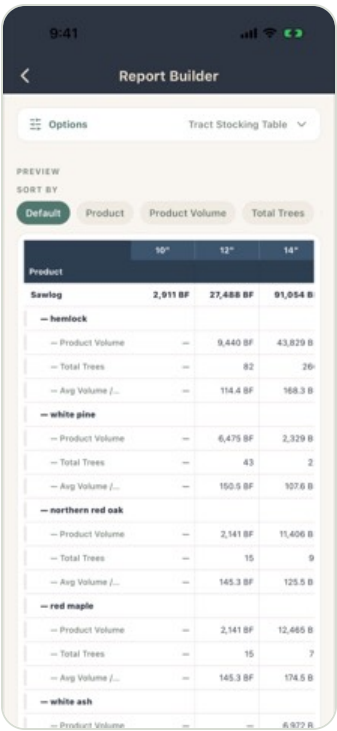


8.14 Your custom reports.



8.15 Builder options.

The preview updates as you go; sort it by any column. Save, then print, export or share it like any other report. Custom reports are kept with your account and appear in the web app too.



8.16 The preview.

On a computer, the same builder at app.forestmetrix.com shows the whole table across the screen as you change options.

app.forestmetrix.com

Report Builder

Hide Options Tract Stacking Table

Report Name
Tract Stacking Table

Metrics
3 selected

Column dimension
DBH / Size Class

Group rows by
Product

Sub-groups
Level 1 Species
Level 2 Metric

+ Add sub-group

Scope
Tract Stand Acre Total

Basis

Plot weighting
By Stand Acreage Equal Weight

8.17 Builder options in a browser.

app.forestmetrix.com

Report Builder

Options Tract Stacking Table

PREVIEW
SORT BY
Default Product Product Volume Total Trees Avg Volume / Tree

Product	10"	12"	14"	16"	18"	20"	22"	24"	26"	28"	30"
Sawlog	---	2,432 BF	35,099 BF	17,922 BF	23,684 BF	37,793 BF	10,001 BF	15,709 BF	6,296 BF	1,321 BF	---
-- white pine	---	---	---	---	---	---	---	---	---	---	---
-- Product Volume	---	5,031 BF	12,187 BF	6,520 BF	5,719 BF	16,680 BF	10,974 BF	5,432 BF	---	---	---
-- Total Trees	---	85	84	39	18	33	16	8	---	---	---
-- Avg Volume / Tree	---	60.5 BF	145.5 BF	210.2 BF	388.8 BF	442.4 BF	686.7 BF	651.8 BF	---	---	---
-- northern red oak	---	---	---	---	---	---	---	---	---	---	---
-- Product Volume	---	913 BF	1,381 BF	1,123 BF	1,762 BF	3,339 BF	6,009 BF	2,246 BF	6,206 BF	---	---
-- Total Trees	---	8	8	8	7	11	12	4	9	---	---
-- Avg Volume / Tree	---	99.4 BF	156.1 BF	148.2 BF	252.0 BF	303.8 BF	496.4 BF	505.9 BF	790.2 BF	---	---
-- hemlock	---	---	---	---	---	---	---	---	---	---	---
-- Product Volume	---	977 BF	3,334 BF	2,244 BF	5,980 BF	---	---	4,520 BF	---	---	---
-- Total Trees	---	10	26	11	26	---	---	8	---	---	---
-- Avg Volume / Tree	---	99.4 BF	128.2 BF	202.8 BF	229.8 BF	---	---	564.8 BF	---	---	---
-- sugar maple	---	---	---	---	---	---	---	---	---	---	---
-- Product Volume	---	---	4,692 BF	3,716 BF	1,681 BF	2,662 BF	1,969 BF	---	---	1,321 BF	---
-- Total Trees	---	---	27	21	8	8	5	---	---	1	---

8.18 The preview in a browser: every DBH class at once.

8.11 FIA comparisons PRO

The USDA Forest Service's Forest Inventory and Analysis (FIA) program measures plots across the country. Forest Metrix can compare your property with the FIA plots around it.

FIA Regional Comparison

1. Choose a search radius: 25 to 200 miles. The app picks the states that fall inside it.
2. Tap **Query FIA Database**. A connection is needed.
3. Compare your property's basal area, trees per acre and volume with the regional averages. Filter by forest type, and see the region's forest types by area.

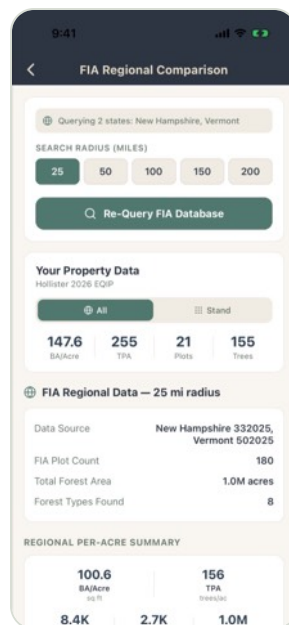
Export the comparison with **Print / PDF** or **Export CSV**.

FIA figures cover growing-stock trees only (5" DBH and up), so expect them to differ from a cruise that includes smaller trees.

FIA Stand Analysis

Builds a stand from FIA data for an area and lets you run the standard reports on it, for a property you haven't cruised yet. Choose a 25- or 50-mile radius around the project's location (or type a latitude and longitude) and tap **Run Analysis**. Diameter distribution, stocking and species composition come from the FIA trees; products and volumes are never assigned, since they can't be inferred from DBH alone.

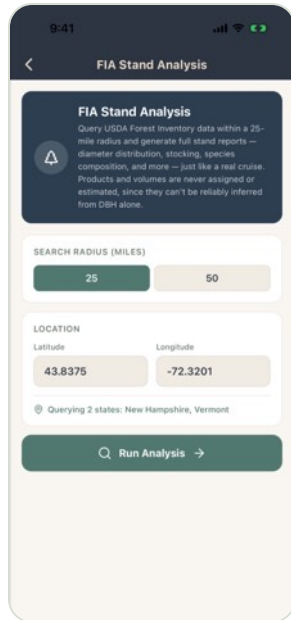
While it's active, every report shows a banner saying the figures are FIA data, *not project data*, and the summary card shows the FIA acres, plots and trees, with a forest-type filter. Tap **End** to go back to your own data.



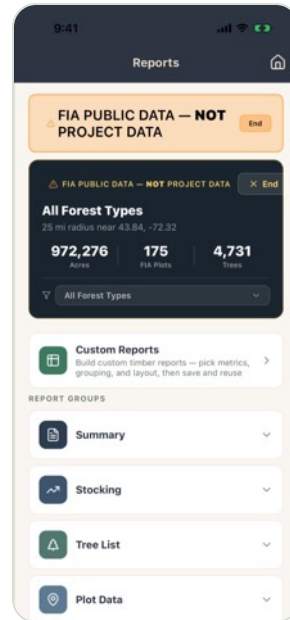
8.19 180 FIA plots within 25 miles.



8.20 Regional forest types.



8.21 FIA Stand Analysis around Whitcomb Hill.



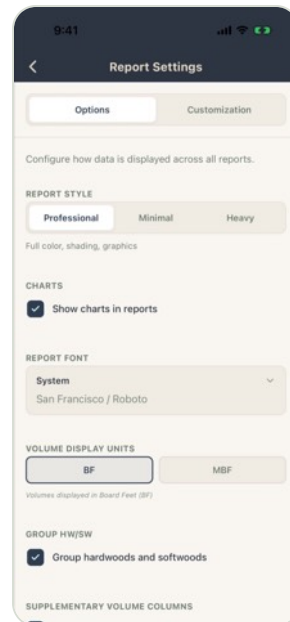
8.22 Reports running on FIA data.

8.12 Report settings

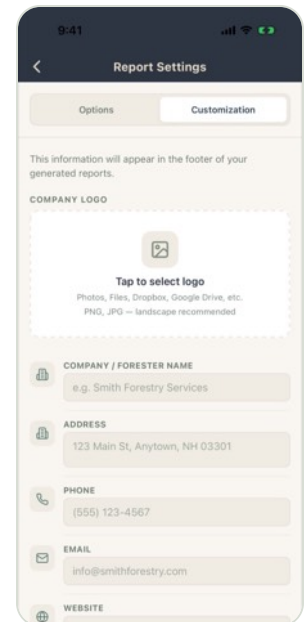
Report Settings (at the bottom of the Reports screen, or under **Settings**) has two tabs.

Options

- **Report Style** **PRO**: Professional (full color and shading), Minimal or Heavy.
- **Charts** **PRO**: show charts in printed reports.
- **Report Font.** **PRO**
- **Volume Display Units**: board feet or MBF.
- **Group HW/SW**: subtotal hardwoods and softwoods.
- **Supplementary Volume Columns**: add cubic feet or tons per acre.
- **Enabled Products**: which products appear in reports.



8.23 Report options.



8.24 Your logo and footer.

Customization

Your company logo, name, address, phone, email and website, printed in the footer of every report. A preview shows how it will look.

8.13 How the numbers are worked out

- **Which plots count.** A plot counts when it has trees or is marked done. Empty plots that aren't marked done are treated as not yet visited and left out, and plots that belong to no stand are left out; a banner says how many of those were left out.
- **Expansion.** On variable-radius plots each tree stands for $BAF \div \text{its basal area}$ trees per acre; on fixed plots, $1 \div \text{plot acres}$. Per-acre figures are averaged over the counted plots in each stand, then combined across stands by acreage (or equally, if you choose).
- **100% tally stands** divide by the stand's acres instead of averaging plots, and have no sampling error.
- **Volume** follows each product's volume rule and the project's taper model (Mesavage & Girard / Parker 1998 by default; Clark & Souter or Behre if you choose). Defect is deducted. Long calls are cut into logs no longer than Max Length Cut Log.
- **Double sampling** applies the measure plots' volume per unit of basal area to the counted basal area.

The Tech Manual under [Help & Support](#) has more detail on each method ([Chapter 14](#)).

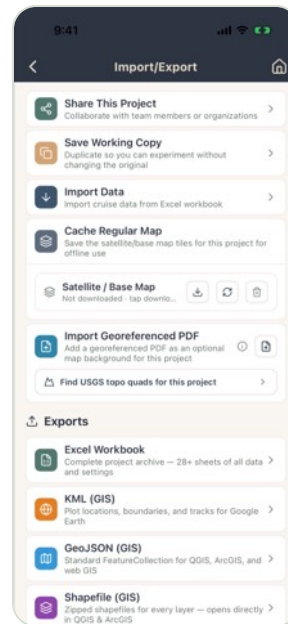
Import and export

Export all your data (a complete Excel workbook, GIS files, plot photos, and files for USFS planning software) and bring data in: spreadsheets from other cruises, georeferenced maps and topo quads.

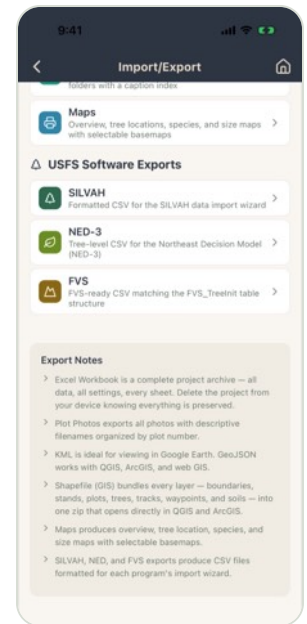
9.1 The Import/Export screen

Tap **Import/Export** on Project Home's bottom bar. Everything here applies to the open project.

- **Share This Project** : give teammates or your organization access (Chapter 12).
- **Save Working Copy** : a separate copy to experiment with (Chapter 2, section 2.4).
- **Import Data** **PRO** : bring in stands, plots and trees from Excel (section 9.5).
- **Cache Regular Map** **PRO** : download, refresh or clear this project's offline map (Chapter 7, section 7.7).
- **Import Georeferenced PDF** **MAX** and **Find USGS topo quads** (section 9.6).
- **Exports, Maps and USFS Software Exports** (sections 9.2 to 9.4).



9.1 Import/Export.



9.2 USFS exports and notes.

Export Notes at the bottom summarize what each format holds.

9.2 Exporting project data

Tap an export. The app builds the file and opens the share sheet: save it to Files, AirDrop it to your computer, email it, or send it to Google Drive or Dropbox.

EXPORT	WHAT YOU GET
Excel Workbook	The complete project archive: every stand, plot, tree, observation and setting, on 28 or more sheets. Keep one when you finish a project. It can be imported again (section 9.5).
KML (GIS) PRO	Plot locations, boundaries and tracks for Google Earth.
GeoJSON (GIS) MAX	A standard feature collection for QGIS, ArcGIS and web maps.
Shapefile (GIS) MAX	A zip of shapefiles, one per layer (boundary, stands, plots, trees, tracks, waypoints and soils), that opens directly in QGIS and ArcGIS.
Plot Photos	Every plot photo in a zip, in folders by plot number, with an index of captions.

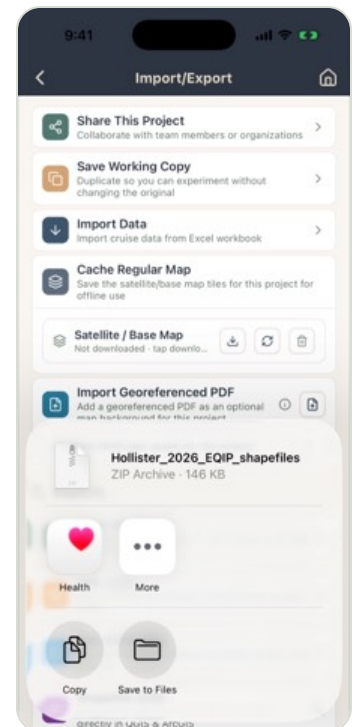
If a project has no photos or no GPS locations, the app says so instead of making an empty file.

9.3 USFS software exports **PRO**

Three exports produce CSV files formatted for USDA Forest Service planning programs. Each matches that program's own import format:

- **SILVAH:** for the SILVAH data import wizard (Allegheny and northern hardwood prescriptions).
- **NED-3:** a tree-level CSV for the Northeast Decision Model.
- **FVS:** matching the Forest Vegetation Simulator's FVS_Treelnit table, for growth projections.

They need tree data; a project without trees shows a warning.



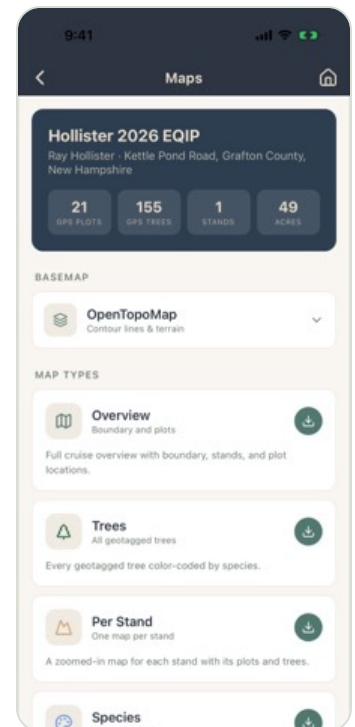
9.3 An export ready to save or send.

9.4 Shareable maps PRO

Maps makes interactive map pages you can send to a landowner or colleague. They open in any web browser, no app needed. The top shows what can be mapped: plots and trees with GPS, stands and acres.

- **Basemap:** satellite, outdoors, streets, OpenStreetMap, OpenTopoMap, USGS Topo and others.
- **Map types:** *Overview* (boundary, stands and plots), *Trees* (every tree with a location, colored by species), *Per Stand* (a zoomed map of each stand), *Species* and *Size*.

Tap the download button on a map type to export it, or **Export All Maps**. Tree maps need trees with GPS locations ([Chapter 5](#)).



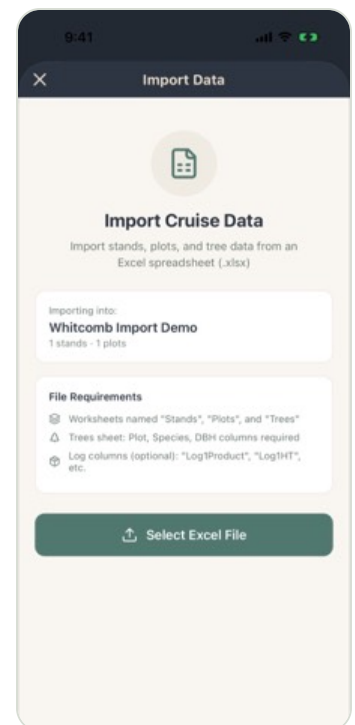
9.4 Shareable maps.

9.5 Importing from Excel PRO

Open the project to import into, then **Import/Export** > **Import Data**. It brings stands, plots and trees from an Excel workbook into that project: an older cruise, data from another program, or a Forest Metrix workbook.

File requirements: worksheets named *Stands*, *Plots* and *Trees*. The *Trees* sheet needs Plot, Species and DBH columns; log columns (such as *Log1Product*, *Log1HT*) are optional.

1. Tap **Select Excel File** and choose the .xlsx file.
2. The app reads it and summarizes what it found, or explains what went wrong.
3. **Species:** match any species it doesn't recognize to your species list. It suggests likely matches; you can search for others.
4. **Products:** match each unrecognized product to one of yours, add it as a new product, or skip it (its logs are then left out). **Next** waits until every product has a choice.
5. **Preview:** what will be created and skipped. Choose *Append* to add to the project or *Replace* to replace its data.



9.5 Start: the target project and what the file needs.

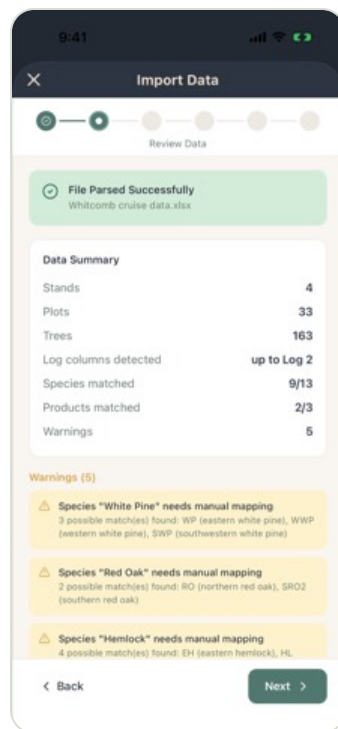
6. Tap **Import Data**. The app reports what it imported, with a log.

REPLACE MEANS REPLACE

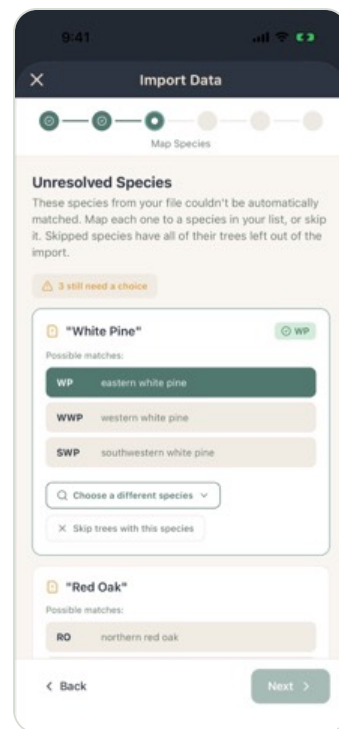
Replace deletes the project's existing stands, plots and trees before importing. Make a working copy first if you're unsure.

INTO A NEW PROJECT

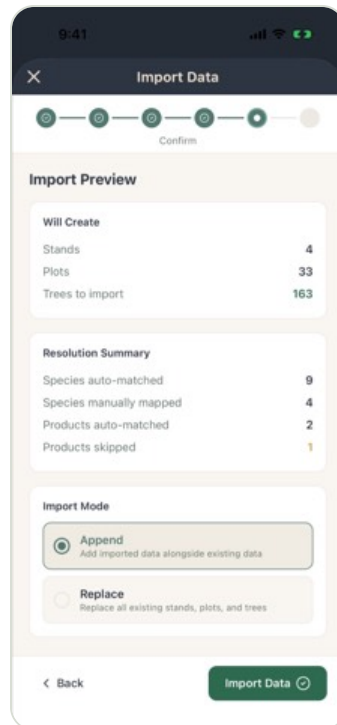
A new project starts with an empty Stand 1 and Plot 1. *Append* works: an empty plot whose number the file uses is dropped in favor of the imported one.



9.6 What the app found in the workbook.



9.7 Matching a species the app didn't recognize.



9.8 The preview, with Append or Replace.

9.6 Importing maps MAX

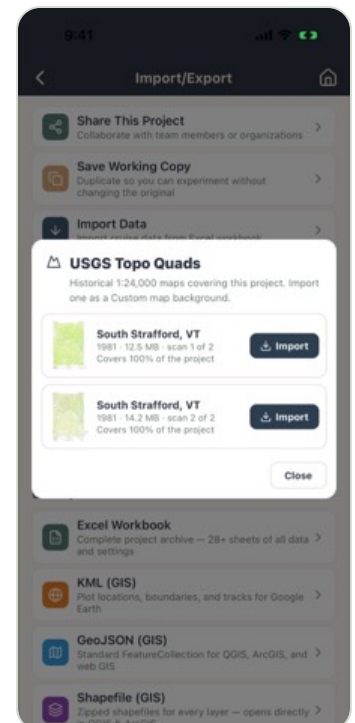
Georeferenced PDF

Tap **Import Georeferenced PDF** and choose a PDF up to 100 MB that carries its own map coordinates (a GeoPDF), such as a management-plan map exported from ArcGIS or QGIS. The app turns it into map tiles stored on the phone. If the PDF has no coordinates, or is too large, the app tells you.

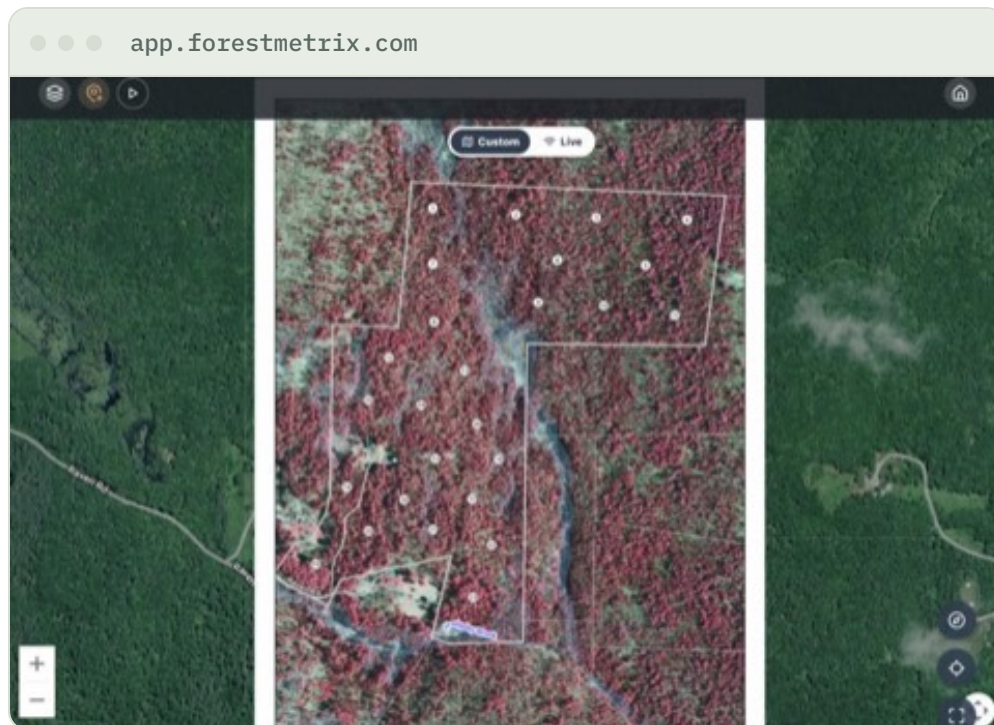
The PDF is processed on the server, which takes a minute or so; its row reads *processing* until it's ready. Once imported, choose **Custom** above the project map to use it ([Chapter 7](#), section [7.8](#)). The PDF's row here lets you refresh it, download it for offline use, or remove it.

USGS topo quads

Find USGS topo quads for this project lists the historical USGS 1:24,000 quads that cover the property, with the year, the scan and how much of the project each covers. Tap **Import** to add one as a custom map.



9.9 Historical topo quads covering the property.



9.10 An imported PDF map, lined up over the satellite map.

9.7 Other imports

- **Boundaries and stands** from KML or GeoJSON: [Chapter 3](#), sections [3.2](#) and [3.8](#).
- **Plot locations** from KML: [Chapter 4](#), section [4.6](#).
- **Templates**: export a template to a file and import it on another account ([Chapter 10](#)).
- **Custom reports**: **Import Report** in Custom Reports brings in a report someone shared ([Chapter 8](#), section [8.10](#)).

Templates

A template is your standard setup (sampling method, species, products, prices, tally method and the data you collect), saved once and used to start every new project. This chapter covers managing your templates and the settings they hold.

10.1 Templates and project settings

Every project carries its own copy of the settings. When you create a project, the settings are copied from a template, or from another project ([Chapter 1](#), section [1.7](#)). After that, the project and the template are independent:

- Changing a **project's** settings (Settings on Project Home) affects only that project.
- Changing a **template** affects new projects made from it. Existing projects are never changed.

The Setup Wizard builds your first template when you first sign in ([Chapter 1](#), section [1.5](#)). Make more for different kinds of work: a timber sale template, a management-plan template with regeneration and snags, a 100% tally template.

WHICH SETTINGS AM I EDITING?

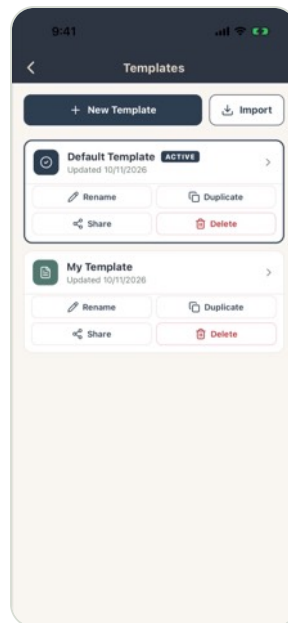
Settings opened from Project Home edit that project; the heading names it. Settings opened from the Projects screen (no project open) lead to

Template Settings, and the heading reads *Editing: Default Template*.

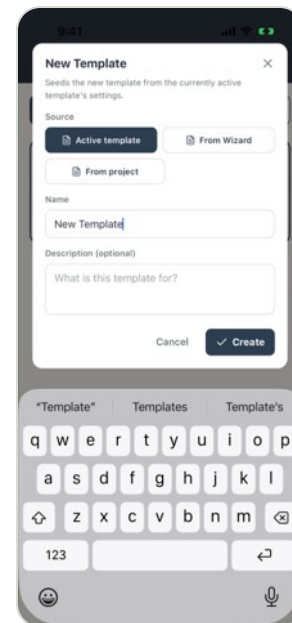
10.2 Managing templates

On the Projects screen, tap **Settings** > **Template Settings** . The Templates screen lists your templates; the active one (used for new projects unless you choose otherwise) is marked **ACTIVE** .

- Tap a **template** to make it active and edit its settings.
- **Rename** , **Duplicate** and **Delete** . Your last template can't be deleted.
- **Share** (section [10.3](#)).
- **+ New Template** : start from the *active template*, from the *Setup Wizard*, or from a *project* whose settings you like. Give it a name and, if you like, a description.
- **Import** : load a template file (*.cruisemplate.json*) someone sent you.

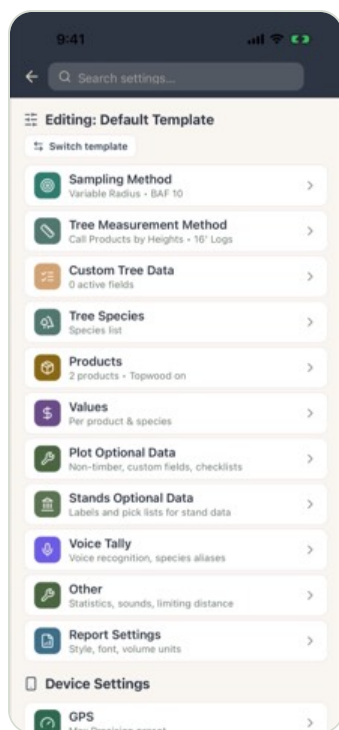


10.1 Your templates.



10.2 A new template.

Once you've chosen a template, the Settings list shows every setting it holds, including **Sampling Method** , which only templates have (section [10.4](#)). **Switch template** at the top goes back to the list.



10.3 Editing a template.

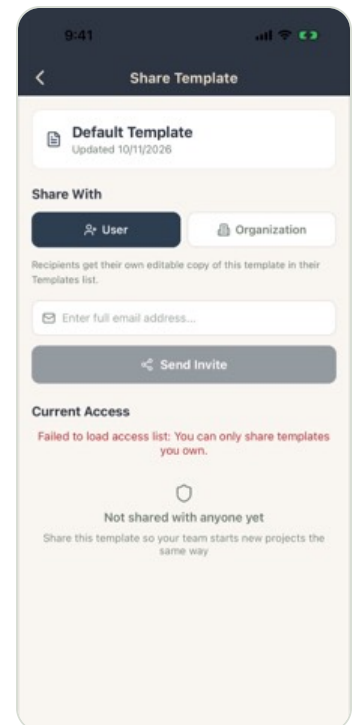
10.3 Sharing a template

Tap **Share** on a template to give a colleague your setup.

- **User**: type their Forest Metrix sign-in email and tap **Send Invite**.
- **Organization**: share with everyone in one of your organizations ([Chapter 12](#)).

Recipients get their own editable copy in their Templates list, marked **SHARED**. It refreshes when you change yours, and they can remove it.

Current Access lists who has it; **Revoke** takes it back.

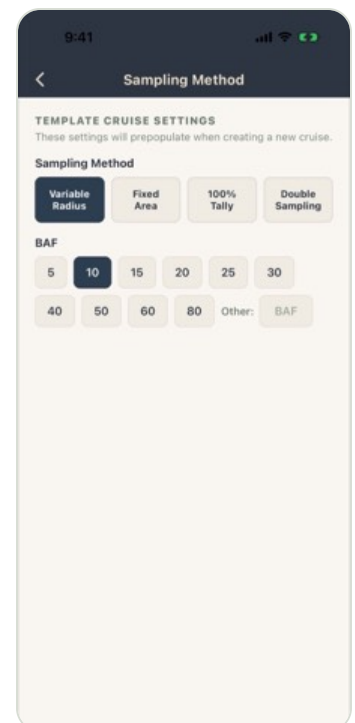


10.4 Share a template.

10.4 Sampling method

A template's **Sampling Method** pre-fills New Project: **Variable Radius** with a BAF, **Fixed Area** with a plot size, **100% Tally**, or **Double Sampling** with count and measure BAFs. You can still change it when creating the project.

For an existing project, change the method in Edit Project ([Chapter 2](#)), and for one stand in its Sampling Settings ([Chapter 3](#)).

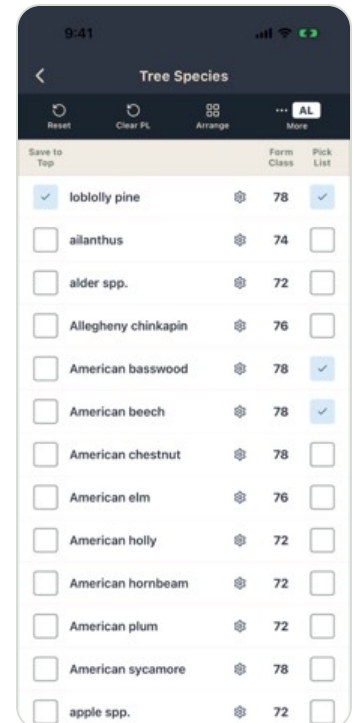


10.5 The template's default sampling.

10.5 Tree species

Settings > **Tree Species** holds the species database for your state (the state is shown at the top right; tap **More** > **State** to change it).

- **Pick List:** tick the species you tally. Only these appear on the tally screen. Keep it short.
- **Save to Top:** pin your most common species to the top of the pick list.
Arrange sets their order: tap two species to swap them.
- **Form Class:** each species' Girard form class, used by the volume equations. Tap the  to change it.
- **Reset** restores the state's defaults; **Clear PL** empties the pick list.
- **More** also has **FIA Species Import:** from a location (or your GPS) and radius, load the most common species nearby into your pick list.
- **Custom names:** rename a species (*hard maple* for sugar maple, say). The name is used on every screen, report and export.
- **Weight factors** feed the tons volume rules.



10.6 Alabama's species, loblolly pine saved to the top.

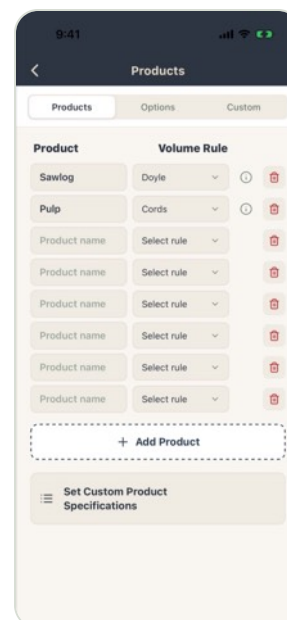
10.6 Products, volume rules and taper

Settings > **Products** has three tabs.

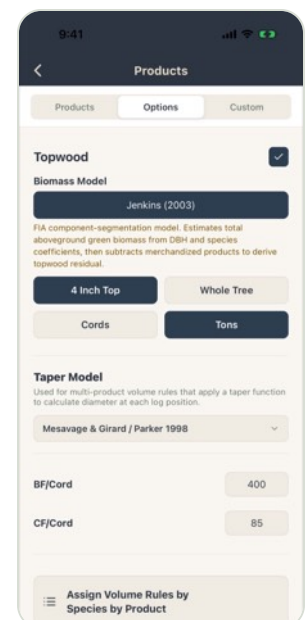
Products

The products you tally (sawlog, pulp, veneer, cordwood and so on), each with its **volume rule**: Doyle, Scribner, Scribner Decimal C, International 1/4", cubic feet, cords, or tons. Basic allows two products; Pro and Max up to 20. Tap **+ Add Product** to add one. Renaming a product updates every tree, rule and price that uses it.

Set Custom Product Specifications sets the minimum and maximum diameter of each product for each species, inside bark (DIB) or as DBH. The tally screen then warns when a call doesn't meet the spec.



10.7 Products and their volume rules.



10.8 Topwood, taper and conversions.

Options

- **Topwood:** the wood above your products, from the Jenkins (2003) biomass model, to a 4" top or the whole tree, in cords or tons.
- **Taper Model:** Mesavage & Girard / Parker 1998 (the default), Clark & Souter, or Behre's hyperbola. Clark & Souter and Behre need total heights.
- **BF/Cord** and **CF/Cord** conversion factors.
- **Assign Volume Rules by Species by Product** : a different rule for a species, for example Scribner for softwoods and International for hardwoods. The list shows the species on your pick list; **Show all species** adds the rest. Tap a rule to choose from the list, or *Default* to use the product's own rule.

Custom MAX

Add Custom Volume Rules : enter your own volume table (DBH by height, or pasted CSV) in board feet, cubic feet, cords, tons or your own unit. Each table chooses its height axis (16' logs, merchantable feet or total feet) and replaces that product's volume. Trees outside the table use the nearest edge value and are flagged. Custom rules sync to all your devices.

10.9 Product specs: defaults for all, loblolly pine fine-tuned.

10.10 A new rule: paste the table as CSV...

DBH\height	1	1.5	2	2.5	3
10	35	50	60	65	70
12	55	75	90	105	115
14	80	105	130	155	170
16	105	145	180	210	235
18	135	185	235	275	310
20	170	235	295	350	400

10.11 ...check the volumes...

10.12 ...and it's ready to choose as a product's volume rule.

10.7 Stumpage values

Settings > **Values** holds the prices the value reports use ([Chapter 8](#), section [8.6](#)).

- **Default Values:** one price per product: sawlog per MBF (or per board foot), pulp per cord, topwood per ton. Every species uses these unless you give it its own.
- **Sawtimber prices per:** **MBF** or **Board foot**. This only says what your numbers mean: 400 reads as \$400 per MBF or \$400 per board foot.
- **Species Values:** a price for a species and product. A blank box shows the default it will use.

Prices are per project; set your usual prices in your template. A list that's all zeros counts as unpriced.

The screenshot shows the 'Values' settings screen. At the top, there's a 'Default Values' section with a note: 'Set a default price for each product. Every species uses it unless you enter its own price below; a blank species shows the default it will use. Each price is per the unit shown beside its product.' Below this, there are three input fields for 'Sawtimber prices per': 'MBF (1,000 bd ft)' with a value of 250, 'Board foot' with a value of 12, and 'TOPWOOD \$/TON' with a value of 3. A note explains: 'This sets what your prices mean, not their amounts: a price of 400 reads as \$400 per MBF or \$400 per board foot. Pick the one you entered.' Below this is a 'Species Values (14)' section with a 'Pick List' button. It shows a grid of input fields for various species: beech, balsam fir, black cherry, hemlock, eastern hophornbeam, and white pine. Each species has three input fields for 'SAWLOG \$/MBF', 'PULP \$/CORD', and 'TOPWOOD \$/T.'. The values shown are 250, 12, and 3 respectively for each species.

10.13 Stumpage prices.

10.8 Custom tree data PRO

Settings > **Custom Tree Data** sets what you record on each tree beyond species, DBH and products ([Chapter 5](#), section [5.6](#)):

- **Custom fields:** up to seven. Type a label (*Status*, *Crown Class*, *Damage*), tap the pick list to give its answers (*AGS*, *UGS*, *Cull*), and tick **Use**. Tick **Req** to make it required. A field without a pick list takes typed text. Basic includes one field.
- **Defect**, **Total Height** and **Manual Tree #** switches. Total Height can be On (asked once per tree) or Required.

Fields appear on the tally screen in this order, in the reports, and as columns in exports.

The screenshot shows the 'Custom Tree Data' settings screen. It features a table of 'CUSTOM FIELDS' with the following columns: 'FIELD LABEL', 'PICK LIST', 'USE?', and 'REQ?'. There are six rows of fields, each with a label, a pick list, and checkboxes for 'USE?' and 'REQ?'. Below the table is an 'ADDITIONAL OPTIONS' section with three switches: 'Defect', 'Total Height', and 'Manual Tree #', all currently turned off.

10.14 Custom tree data.

10.9

Stand fields

PRO

Settings › **Stands Optional Data** : up to 12 stand fields, such as forest type, size class, stocking, site class or management objective. Give each a label and, if you like, a pick list. They appear when you add or edit a stand ([Chapter 3](#)) and print on stand reports and plans. Acres and notes are always included; a field with no label doesn't appear.

Plot-level data (regeneration, snags, CWM, plot fields, checklists and tables) is set up under **Plot Optional Data** ([Chapter 6](#), section [6.9](#)).

9:41

Stand Optional Fields

	LABEL	PICK LIST
1	edit label	edit list
2	edit label	edit list
3	edit label	edit list
4	edit label	edit list
5	edit label	edit list
6	edit label	edit list
7	edit label	edit list
8	edit label	edit list
9	edit label	edit list
10	edit label	edit list
11	edit label	edit list
12	edit label	edit list

Acres and Notes are always shown. Fields with an empty label will not appear when adding a new stand.

10.15 Stand fields.

Settings

Where every setting lives: what belongs to the project, what belongs to your account, and what stays on this phone, plus the settings that don't have a home in another chapter.

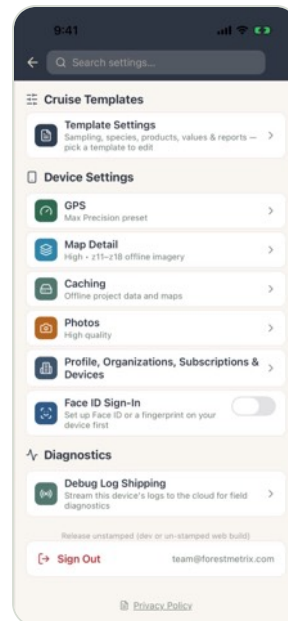
11.1 The Settings screen

Tap **Settings** at the bottom left of Project Home or the Projects screen. Type in the search box at the top to jump to any setting.

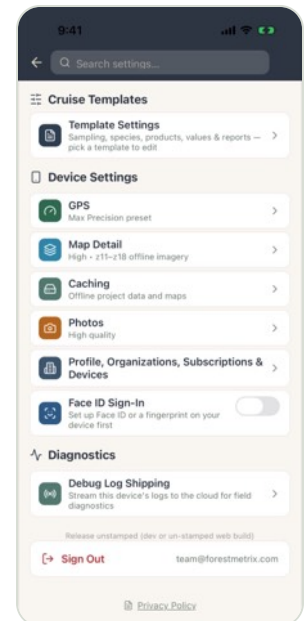
- **From Project Home:** *Project Settings* for the open project, then *Device Settings*.
- **From the Projects screen:** *Cruise Templates* › **Template Settings** (Chapter 10), then *Device Settings*.

On an iPad the list and the setting you're editing sit side by side.

Each row shows its current value under its name, such as *Call Products by Heights · 16' Logs*, so you can check a setup at a glance.



11.1 Project settings.



11.2 From the Projects screen.

11.2 Project settings at a glance

These belong to the project (or template) and travel with it to every device and to anyone it's shared with.

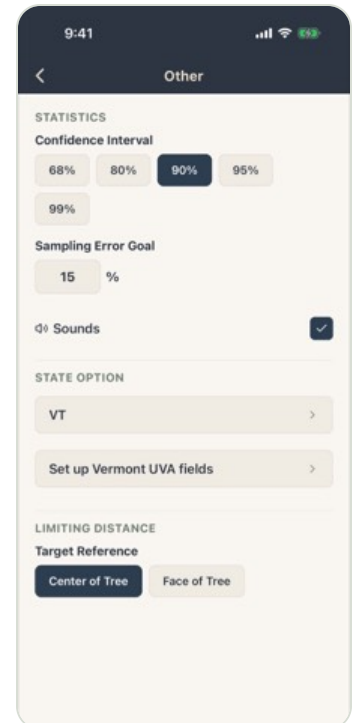
SETTING	WHAT IT CONTROLS	SEE
Sampling Method	Templates only: the default method and BAF for new projects.	<u>10.4</u>
Tree Measurement Method	Tally method, height and DBH entry, tenths, Max Length Cut Log, Pulp Clicker, limiting distance, DIB.	<u>5.2</u>
Custom Tree Data	Your tree fields, defect, total height, manual tree number.	<u>10.8</u>
Tree Species	Pick list, favorites, form class, custom names, FIA import.	<u>10.5</u>
Products	Products, volume rules, specifications, topwood, taper, custom volume tables.	<u>10.6</u>
Values	Stumpage prices.	<u>10.7</u>
Plot Optional Data	Regeneration, snags, CWM, plot fields, checklists, tables.	<u>6.9</u>
Stands Optional Data	Stand fields.	<u>10.9</u>
Voice Tally	Voice Tally on or off, commands, aliases, practice.	<u>5.12</u>
Other	Confidence level, sampling-error goal, sounds, state options, limiting-distance reference.	<u>11.3</u>
Report Settings	Report style, font, units, products shown, logo and footer.	<u>8.12</u>

SOME SETTINGS LOCK

Once a project has tallied trees, its tally method and height entry are locked, so a project never mixes two ways of recording trees.

11.3 Other: statistics, sounds and state options

- **Confidence Interval:** 68%, 80%, 90% (the default), 95% or 99%. Sampling error and confidence limits use it ([Chapter 8](#)). 68% is the NRCS standard.
- **Sampling Error Goal:** the error you're aiming for, 15% by default. Sampling Analysis says how many more plots you'd need to reach it.
- **Sounds:** the beep on each saved tree. The vibration stays.
- **State Option:** state-specific features. For Vermont, **Set up Vermont UVA fields** adds the stand and plot fields the Use Value Appraisal program's forest management plan needs.
- **Limiting Distance › Target Reference:** whether you measure to the **Center of Tree** or the **Face of Tree**; the limiting-distance calculator adjusts accordingly ([Chapter 5](#), section [5.7](#)).



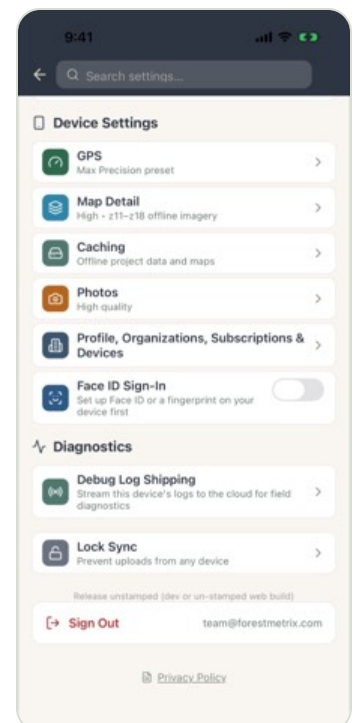
11.3 Other settings.

11.4 Device settings

These belong to this phone or tablet only. Your other devices keep their own.

- **GPS** **PRO**: accuracy and battery presets, averaging ([Chapter 7](#), section [7.9](#)).
- **Map Detail** **PRO**: offline map resolution and default imagery ([Chapter 7](#), section [7.7](#)).
- **Caching** **PRO**: what's stored on this phone ([Chapter 7](#), section [7.7](#)).
- **Photos:** section [11.5](#).
- **Profile, Organizations, Subscriptions & Devices:** Chapters 12 and 13.
- **Face ID Sign-In:** section [11.6](#).
- **Diagnostics:** section [11.7](#).

At the bottom: **Sign Out**, the account you're signed in as, and the **Privacy Policy**.

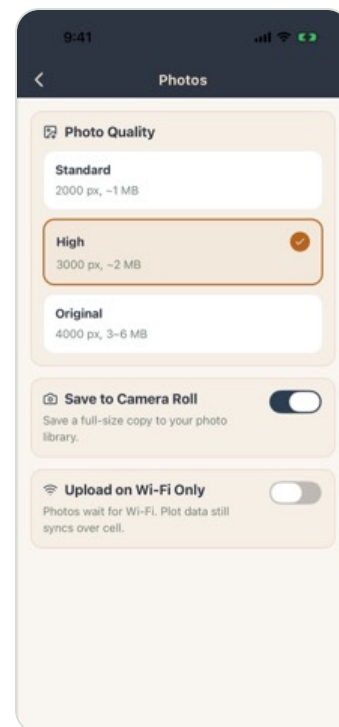


11.4 Device settings.

11.5 Photos

- **Photo Quality:** **Standard** (2000 pixels on the long side, about 1 MB), **High** (3000 px, about 2 MB), or **Original** (4000 px, 3–6 MB). Higher quality shows more detail when zoomed, but uploads take longer and use more storage.
- **Save to Camera Roll:** also keep a full-size copy in your phone’s photo library.
- **Upload on Wi-Fi Only:** photos wait until you’re on Wi-Fi. Plot data still syncs over cell.

These apply to photos you take from now on, on this device.



11.5 Photo settings.

11.6 Face ID and signing out

- **Face ID Sign-In** (or fingerprint on supported devices): sign in with your face instead of your password. Set up Face ID on the phone first, then turn this on.
- **Sign Out:** signs you out of this device after you confirm. Your projects stay on the phone and are there when you sign back in.

BEFORE YOU SIGN OUT

Check that Project Home says *Synced* for the projects you worked on ([Chapter 2](#), section [2.8](#)), so your latest work is in the cloud and on your other devices.

11.7 Diagnostics and Lock Sync

- **Debug Log Shipping:** sends this device’s logs to Forest Metrix so support can diagnose a problem. Turn it on only when support asks; turn it off afterwards.
- **Lock Sync:** stops every device from uploading changes to the open project, for example while you hand-correct a finished cruise in the office and don’t want stray field changes. Unlock it to resume.

For problems, see [Chapter 14](#).

Sharing, organizations and sync

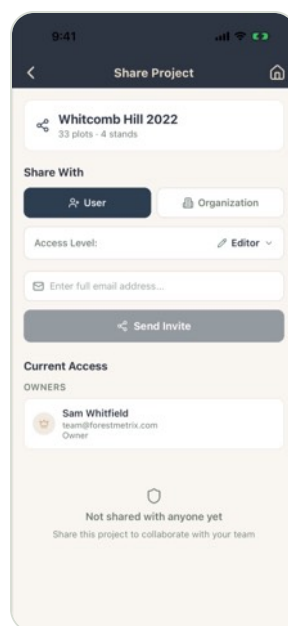
Join forces with any Forest Metrix user, inside or outside your organization. Understand how everyone's work comes together through sync, and use the Office pages in a browser.

12.1 Sharing a project

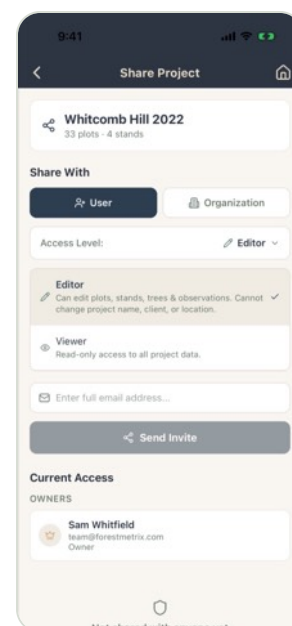
Open the project and tap **Import/Export** >

Share This Project, or on the Projects screen tap **Sharing** > **Share a Project** and pick it.

1. Choose **User** to share with one person, or **Organization** for everyone in one of your organizations.
2. Choose the **Access Level**:
 - **Editor**: can add and edit plots, stands, trees and observations. Can't change the project's name, client or location.
 - **Viewer**: can see everything, change nothing.
3. Type their Forest Metrix sign-in email and tap **Send Invite**.



12.1 Share a project.



12.2 Editor or Viewer.

Current Access lists the owner and everyone the project is shared with. Remove anyone at any time; the project then becomes read-only on their devices, with a banner.

THE PERSON NEEDS AN ACCOUNT

Projects are shared with a Forest Metrix login. If the person doesn't have one yet, they set one up at account.forestmetrix.com first ([Chapter 1](#), section [1.1](#)).

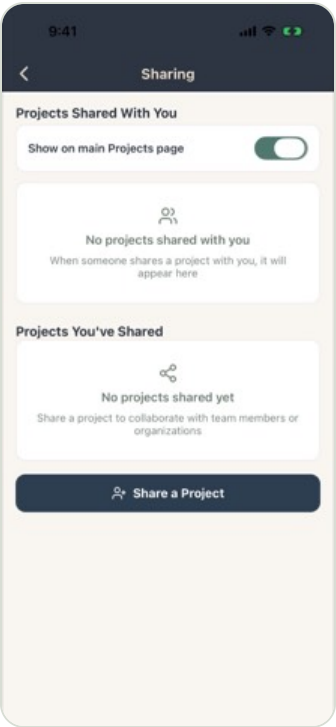
12.2 Projects shared with you

Projects others share with you appear on your Projects screen alongside your own. If one hasn't appeared, tap the refresh arrow at the top of the Projects screen.

Sharing on the Projects screen lists:

- **Projects Shared With You**, with **Show on main Projects page** to keep them out of your main list if you prefer.
- **Projects You've Shared**, and with whom.

To make your own copy of a shared project, use **Save Working Copy** ([Chapter 2](#), section [2.4](#)).



12.3 Sharing.

12.3 Organizations

An organization is a group (your company or crew) that you can share projects and templates with in one step. Manage it under **Settings** ›

Profile, Organizations, Subscriptions & Devices › **Your Organizations** .

- **+ Create Organization** and give it a name. You're its owner.
- Invite members by email and give each a role:

ROLE	CAN
Owner	Everything, including deleting the organization.
Admin	Manage members and the organization's projects.
Cruiser	Collect and edit data on the organization's projects.
Viewer	See the organization's projects; change nothing.

Organizations are separate from seats: who may use Forest Metrix is managed on your account page ([Chapter 13](#)).

12.4 How sync works

- **Phone first.** On a phone or tablet everything is saved on the device first, so you can cruise all day without signal.
- **Uploads:** changes upload about 15 seconds after you stop editing whenever you're online, and again as soon as you're back in coverage.
- **Downloads:** changes made on other devices to the project you have open arrive about every minute. Other projects update when you open them.
- **New device:** when you sign in on a new phone, your projects are restored from the cloud.
- **The web app** works from the cloud and needs a connection.

The strip above Project Home's bottom bar shows where the project stands: *Synced*, *Syncing*, or *Sync pending* ([Chapter 2](#), section [2.8](#)).

12.5 Working on the same project

- Each edit is recorded on its own, field by field. Two cruisers working different plots, or different fields of the same plot, don't overwrite each other.
- If two people change the *same* field of the same record, the most recent change is normally the one kept, so agree who edits what.
- Deleted records stay deleted; a device that syncs later won't bring them back.
- New fieldwork on a project someone archived in the office un-archives it, so field data never disappears into the archive.

SPLITTING A CREW

Give each cruiser their own plots or stands. Plot numbers are shared across the project, so if two people add plots by hand at the same time, agree number ranges first (for example, 100s and 200s).

12.6 The Office pages

The Office pages are Forest Metrix in a web browser, for work at a desk. Tap **Office** on the Projects screen, or go to app.forestmetrix.com/office and sign in with the same login.

- **Clients:** your landowners and clients, with their contacts, parcels and projects.
- **Reports:** the Vermont UVA management plan, built from a cruise and shared with everyone on the project.
- **Settings and Account Management.**

Projects show up here, with their latest counts, once they sync from the field.

Chapter 15 covers the Office pages in full.

Account and devices

Your login, your seat on the account, your subscription, and your devices.

13.1 Your account and seats

Accounts, seats and billing are managed on the account page at **account.forestmetrix.com**, not in the app ([Chapter 1](#), section [1.1](#)). There you, or your account administrator, can:

- add people to the account: create their login, or send an invitation so they set their own password;
- give out seats. Being on the account and holding a seat are separate, so you can add people first and assign seats as they free up;
- remove someone, which frees their seat. Their synced projects stay with the account.

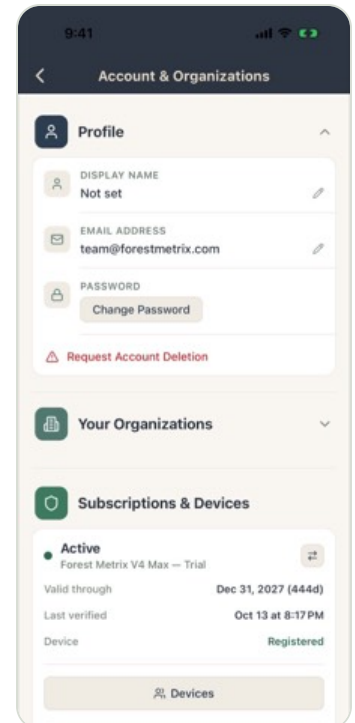
The app checks two things when you sign in: that the account is active, and that *you* hold one of its seats. If either is missing it shows a *No active license* screen. The most common cause is a seat reassigned to someone else. Work already on the device isn't lost, and syncing resumes once a seat is restored. The app picks up seat changes on its own; the refresh arrow on the Subscriptions & Devices card checks right away.

13.2 Profile and password

Settings > **Profile, Organizations, Subscriptions & Devices** opens **Account & Organizations**.

- **Display Name:** how you appear to people you share with. Tap  to change it.
- **Email Address:** your sign-in email.
- **Change Password**.
- **Request Account Deletion** (section [13.7](#)).

The same login works in the app, on the Office pages and on the account page. Forgot your password? Tap **Forgot password?** on the sign-in screen and follow the link in the email ([Chapter 1](#), section [1.4](#)).



13.1 Account & Organizations.

13.3 Subscription

The **Subscriptions & Devices** card shows your license: whether it's active, the version (Basic, Pro or Max), the date it's valid through, when it was last checked, and whether this device is registered.  refreshes it.

Clean Up Unused Photos removes photo files left in cloud storage after their photos were deleted. It doesn't touch any photo that's still in a project.

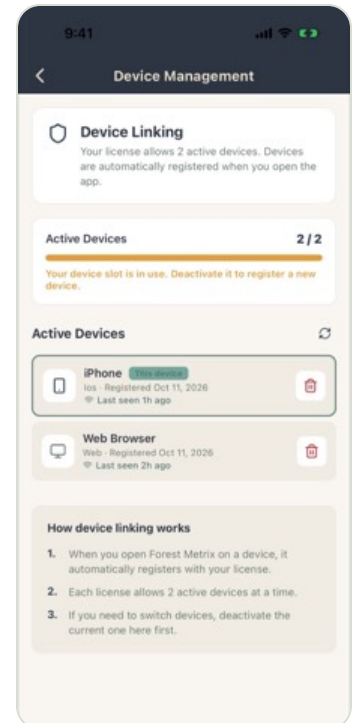
To change your version, add seats or update billing, use the account page.

13.4 Devices

Each phone, tablet or computer registers itself the first time you open Forest Metrix on it. Tap **Devices** on the Subscriptions & Devices card to see them.

- A license allows **2 active devices**, for example your phone and your office computer's browser.
- Each device shows its type, when it registered and when it was last seen. *This device* marks the one in your hand.
- To use a new phone when both slots are full, delete an old device here first, or from the new device when it asks.

If your projects don't appear after freeing up a device, tap the refresh arrow at the top of the Projects screen.



13.2 Two devices registered.

13.5 Signed in on another phone

You can be signed in on one phone or tablet and one computer at a time. If you sign in on a second phone:

- the new phone shows *This login is in use* and takes over after 30 seconds, or straight away with **Take over now** ;
- the first phone then shows *Signed in elsewhere* and stops syncing until you sign in there again.

Work on the first phone that hadn't uploaded stays on that phone; sign back in on it to upload it.

13.6 Trials and versions

- A free trial gives one person full Max access for 14 days. No payment method is collected and nothing is charged.
- When a trial ends, your projects stay stored and downloadable for a week. Subscribe on the account page to keep working.
- Features marked **PRO** or **MAX** in this manual need that version or higher. During a trial, **Compare Versions** on Project Home shows what each version includes.

13.7 Deleting your account

Request Account Deletion asks Forest Metrix to delete your login and your data. Export anything you want to keep first ([Chapter 9](#)). If you're on a company account, your administrator may need to remove you from it instead; your synced projects then stay with the company.

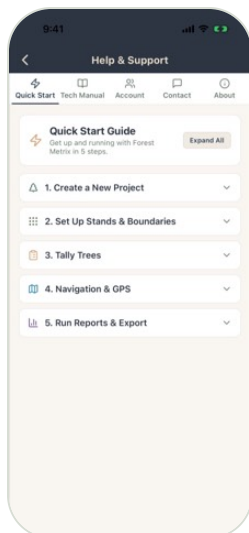
Help and support

Where to find help inside the app, how to reach Forest Metrix, and what to try first when something isn't working.

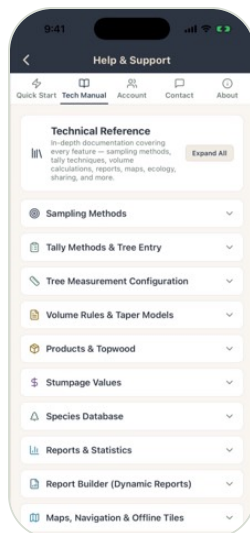
14.1 Help & Support in the app

Tap **Help** on the Projects screen. Five tabs:

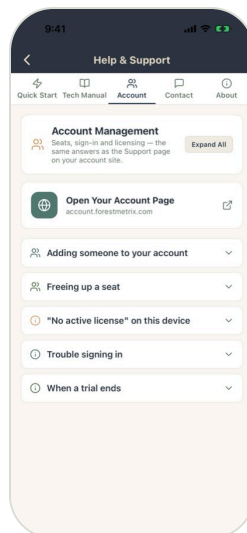
- **Quick Start:** five steps from a new project to a finished report. **Expand All** opens every step.
- **Tech Manual:** a reference to every method and setting: sampling, tally methods, volume rules and taper models, products, values, species, reports, maps, sharing, sync, devices, GPS, photos and Voice Tally. Topics for versions you don't have are marked.
- **Account:** seats, sign-in, licenses and trials, with a link to your account page.
- **Contact:** the help center and a support form (section 14.2).
- **About:** the app version, and **Re-run Setup Wizard**, which walks through the first-time setup again without touching your projects.



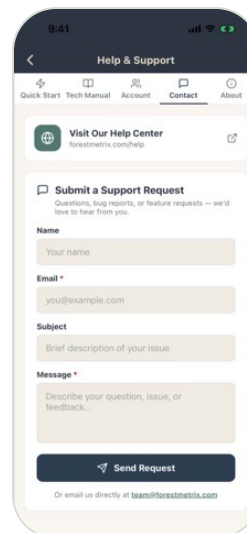
14.1 Quick Start.



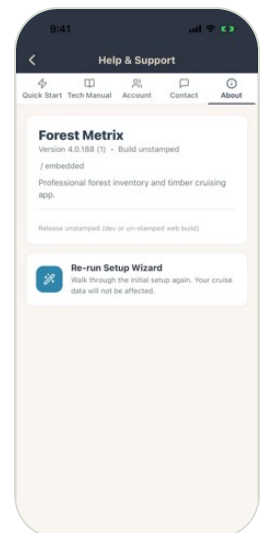
14.2 Tech Manual.



14.3 Account help.



14.4 Contact.



14.5 About.

14.2 Contacting support

- **Support form:** Help > Contact. Your name, your email (required), a subject and your message. Tap **Send Request**.

- **Email:** team@forestmetrix.com.
- **Help center:** the link at the top of the Contact tab.

Help us help you: give the project name, what you were doing, what you expected and what happened instead, and the app version from Help › About.

A screenshot helps. If support asks for logs, turn on **Settings** ›

Debug Log Shipping, repeat the problem, and turn it off again (Chapter 11, section 11.7).

14.3 Troubleshooting

PROBLEM	TRY
A shared project hasn't appeared	Tap the refresh arrow at the top of the Projects screen. Check the owner shared it with the email you sign in with.
"Sync pending" won't clear	Check for a signal or Wi-Fi. Tap the sync strip on Project Home to see why, or to retry. Changes are safe on the phone meanwhile.
Changes from a teammate aren't showing	They arrive about every minute for the project you have open; other projects update when you open them. Make sure the teammate's phone has synced.
No map in the woods	Maps are saved only for projects whose map you saved while online. Next time, open the project on Wi-Fi, tap the map icon at the bottom of Project Home, and wait for the check mark (Chapter 7 , section 7.7).
GPS position jumps or is off	Give the phone a clear view of the sky, hold it away from your body, and wait for the arrow to settle. Turn on averaging (Chapter 7 , section 7.9).
A track stopped when the phone locked	Set location access to <i>Always</i> for Forest Metrix (Chapter 7 , section 7.5).
Plots are in the wrong stand	Plots → By Stand → the pen on a stand card → Reassign Plots (Chapter 3 , section 3.10).
Report numbers look low or high	Read the banners at the top of the report: unfinished plots, plots outside stands, products without a volume rule, stands without acres. Check the plot status on the Plots list (Chapter 4).
Value reports are blank	Enter stumpage prices under Settings › Values (Chapter 10 , section 10.7).
"No active license"	Your seat may have been reassigned. Ask your account administrator, or check the account page (Chapter 13).
"This login is in use"	The account is signed in on another phone. Wait 30 seconds, or tap Take over now (Chapter 13 , section 13.5).
Can't register a new phone	Two devices are already registered. Remove an old one under Devices (Chapter 13 , section 13.4).
Voice Tally doesn't hear species	Use Practice voice tally to see what it hears, and add aliases for the words it misses (Chapter 5 , section 5.12).

PROBLEM

TRY

Photos aren't in the office

Photos upload when you have a connection, or only on Wi-Fi if you set that ([Chapter 11](#), section [11.5](#)).

The Office pages

Forest Metrix at your desk: keep your clients' contacts and properties in order, bring in a cruise from a spreadsheet, and write a Vermont UVA management plan that fills itself in from the field data.

15.1 The Office pages

The Office pages run in a web browser on your computer. They work alongside the field app: the field app collects the data and lays out the job (on the web too, [Chapter 3](#)), and the Office pages handle clients and paperwork.

To open them, do one of these:

- Tap **Office** on the Projects screen of the field app.
- Click **Web Console** on the account page ([Chapter 1](#)).
- Go to app.forestmetrix.com/office and sign in with your usual login.

The menu down the left side:

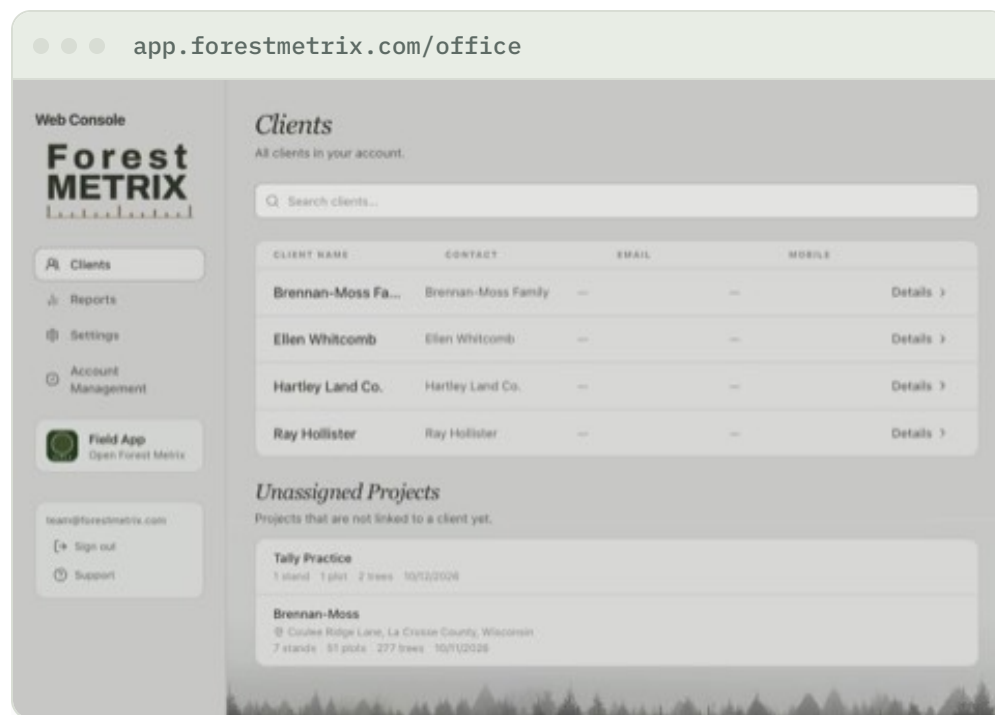
ITEM	WHAT IT OPENS
Clients	Your clients and their projects (section 15.2). The Office pages open here.
Reports	The management plans (section 15.5).
Settings	Your login and license details (section 15.6).
Account Management	The account page, already signed in (Chapter 13).
Field App	Forest Metrix itself, in the browser.
Sign out, Support	Sign out of the Office pages, or open the ways to reach us.

Everything recorded in the field shows up here once it syncs ([Chapter 12](#)).

15.2 Clients

The Clients page lists everyone you work for, with their contact, email and mobile number. Click an email address to write to it, or click **Details** to open

the client (section [15.3](#)). Type in the search box to find a client by name, contact or email.



15.1 Clients, with the projects that have no client yet below.

Unassigned Projects lists your projects that don't belong to a client yet.

ADDING CLIENTS

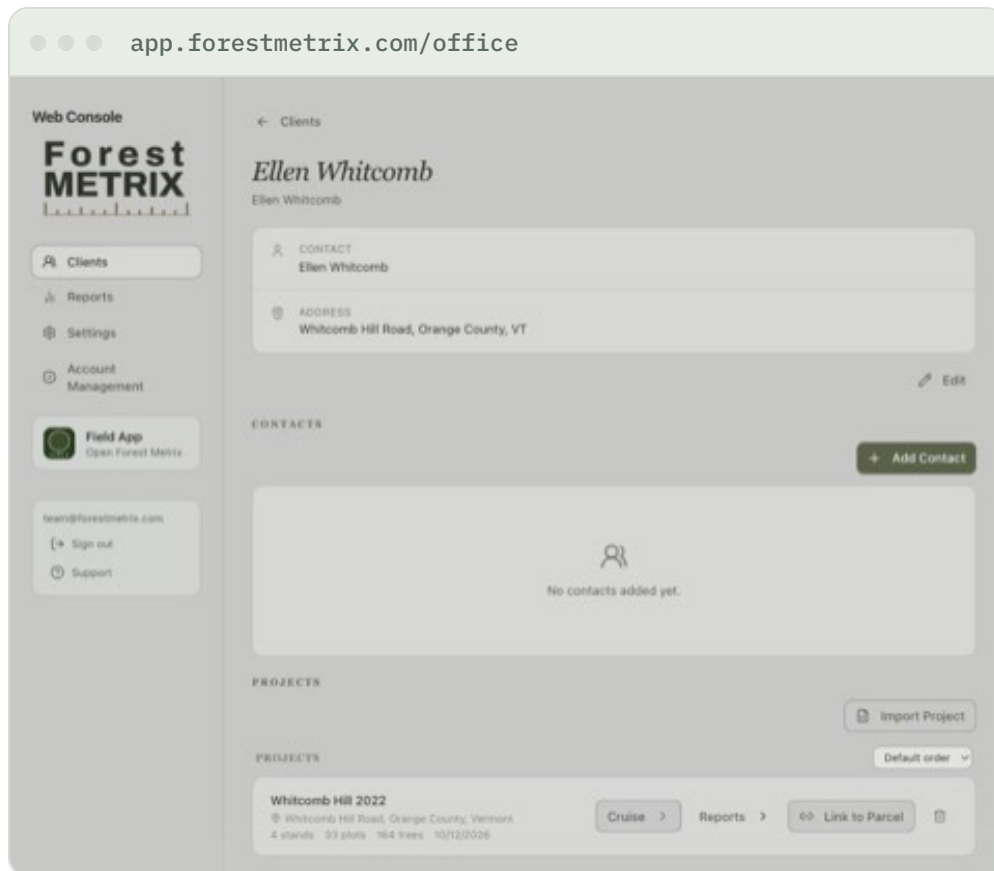
New clients are added in the field app: open the project, tap its name for

Edit Project, then **Client** > **+ New Client** ([Chapter 2](#), section [2.2](#)).

Assigning a client to a project is done the same way, and the project then moves from Unassigned Projects to that client.

15.3 A client's page

A client's page holds their details, the people you deal with, and every project you've done for them.



15.2 A client's page.

Details

Edit , under the details card, changes the client's name, the main contact name and notes.

Contacts

A client can have several contacts: the owners, a forester, an estate lawyer.

Click **Add Contact** .

- **First Name** is the only required field. There's room for a role, email, three phone numbers, a full address and notes.
- **Import from existing contact** at the top copies someone you already have on another client, for a person who owns more than one property.
- Tick **Primary** for the person to contact first.

On the list, the star makes a contact primary, the pen edits them, and the bin deletes them after asking.

app.forestmetrix.com/office

Add Contact

IMPORT FROM EXISTING CONTACT

Search by name, email, or client...

FIRST NAME *
First name

LAST NAME
Last name

ROLE / TITLE
e.g. Owner, Manager

EMAIL

PHONE (OFFICE)

MOBILE

OTHER PHONE
Fax, alternate, etc.

ADDRESS LINE 1
Street address

ADDRESS LINE 2
Suite, unit, PO box, etc.

TOWN / CITY

STATE
e.g. ME

POSTAL / ZIP CODE
e.g. 04401

COUNTRY
United States

NOTES

15.3 Add Contact.

Projects

Each of the client's projects shows its location, its stand, plot and tree counts and when it last changed. Sort them in your own order or *Most recent* first.

- **Cruise** opens the project in the field app, in a new browser tab. On a phone it opens the installed app.
- **Reports** opens the project's Vermont UVA plan in a new tab (section [15.5](#)).
- **Link to Parcel** records which property the project was on (below).
- The bin deletes the project and everything recorded in it. It asks first. Only the project's owner sees it.

Parcels

A parcel is one of the client's properties: a name, address, town, acreage and the tax parcel number. Linking projects to parcels keeps a property's history

together when you cruise it again years later.

- **Link to Parcel** on a project picks one of the client's parcels or creates a new one.
- Once a project is linked, the button reads **Parcel**. Clicking it unlinks the project after asking; the project and the parcel are both kept.
- When a client has parcels, **Add Parcel** adds another, and each parcel can be edited or deleted. Deleting a parcel keeps its projects.

Deleting a client

Delete Client, at the bottom under *Danger Zone*, deletes the client with all their contacts and parcels. Their projects are kept and move to Unassigned Projects.

15.4 Importing a cruise from Excel

To bring in a cruise done in a spreadsheet, open the client and click

Import Project.

1. **Select Parcel.** Every imported cruise belongs to a parcel. Choose one of the client's parcels or type a name for a new one; leave it blank to name the parcel after the project.
2. **File & Details.** Give the project a name and location, set its BAF (10 unless you change it), and choose the Excel file (.xlsx or .xls) from your computer. The page reads it and shows how many stands, plots and trees it found.
3. **Confirm.** Check the counts and click **Import Cruise**. The project appears under the client and in the field app's project list.

The workbook is laid out as for the field app's Excel import: sheets named *Stands*, *Plots* and *Trees* ([Chapter 9](#), section [9.5](#)). The field app's import also matches unfamiliar species codes to your species list, which this one doesn't, so use it for data from another program.

app.forestmetrix.com/office

1 2 3

Import Cruise — Select Parcel

Every imported cruise must be linked to a **Parcel** — the physical property the cruise was conducted on. Select an existing parcel or create a new one.

NEW PARCEL NAME

e.g. North Woodlot, Smith Parcel...

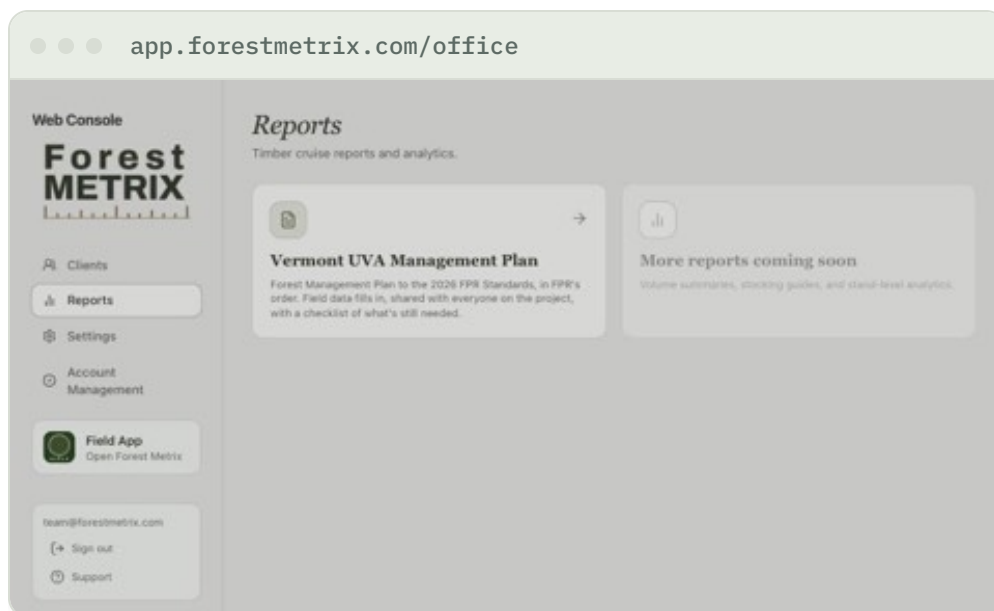
Leave blank to use the project name as the parcel name.

Cancel Next

15.4 Import step 1: the parcel.

15.5 Vermont UVA Management Plan

The plan builder writes a Forest Management Plan for Vermont's Use Value Appraisal program to the 2026 FPR standards, in FPR's order. Your cruise data fills in the numbers; you write the rest on the page.



15.5 Reports.

1. Click **Reports** on the left, then **Vermont UVA Management Plan**. (Or click **Reports** on a project's row on the client's page, which opens its plan directly.)
2. Choose the project. The list has your own projects and those shared with you, marked (*shared*).
3. Work down the plan. Fields with a red *Needs input* tag are still empty; the button at the top, *N need input — next*, jumps to the next one.

- Click **Print / Save PDF** for a copy to submit. Choose *Save as PDF* in your browser's print window.

The screenshot shows the Forest METRIX web console interface. The browser address bar displays `app.forestmetrix.com/office`. On the left is a sidebar with navigation links: Web Console, Forest METRIX logo, Clients, Reports, Settings, Account Management, Field App (Open Forest Metrix), and a user profile for `twam@forestmetrix.com` with links for Sign out and Support. The main content area is titled "Vermont UVA Management Plan" and includes a subtitle: "Forest Management Plan to the 2006 FPR Standards. Field data fills in; you write the rest. Saved for everyone on the project." Below this is an "Auto-save on" toggle and a green "Print / Save PDF" button. A "PROJECT" dropdown menu is set to "Whitcomb Hill 2022 — Ellen Whitcomb". An "Eligibility" section contains text about enrollment subcategory and acreage requirements. The central part of the screen displays a preview of the "Forest Management Plan" cover page, which includes fields for Submission Type (New Plan selected), Plan Expiration Date/Update Deadline (Needs input, April 1, year), Submission Date (10/12/2025), Owner (WHITCOMB, ELLEN), Parcel Town(s) (Needs input), School Property Account Number(s) (Needs input, 123-456-78901), and Grand List Acres (Needs input).

15.6 A new plan: the eligibility checks and the cover page.

What fills in

- The landowner from the project's parcel owner, the stands with their mapped acres, and the stand data for the *Parcel Data Entry Form*: site class, QMSD, total and AGS basal area.
- The treatment schedule, from the prescriptions you write for each stand.
- AMP status, from the *AMP Status* plot field if you recorded it in the field.

app.forestmetrix.com/office

Web Console

Forest METRIX

[Clients](#)
[Reports](#)
[Settings](#)
[Account Management](#)
[Field App](#)
[Open Forest Metrix](#)

team@forestmetrix.com

[Sign out](#)
[Support](#)

Use Value Appraisal Parcel Data Entry Form

Type: new

1) Landowner Name	WHITCOMB, ELLEN ✓
2) Landowner Address, Phone, Email	— enter it earlier in the plan ✓
3) Town That Parcel Is In	— enter it earlier in the plan ✓
4) Total Forestry Acres in Parcel	47
5) Plan Preparer	— enter it earlier in the plan ✓
6) Previous Owner	Only if the land was in UVA under a gov
7) SPAN	— enter it earlier in the plan ✓

8) STAND INFORMATION

Stand #	Acres	Even (1) / Uneven (2)	Site Class	Stand Type	QMSD	Total RA	AGS RA	Mgmt Activity	Treatment Year
1	10		I	—	10	78	45		
2	10		I	—	12	147	97		
3	8		I	—	9	83	40		
4	19		I	—	11	100	65		

15.7 The data entry form, filled in from the cruise.

Stands come first

Start each stand by choosing its **Enrollment Subcategory** (Productive Forestland, Sugarbush, Reserve and so on). It decides which elements the stand needs, and the plan asks for those.

Eligibility

The **Eligibility** box at the top checks the parcel against the program's rules, such as at least 20 acres of forested Site I–III soils and 20 acres actively managed, and names the section of the standards each rule comes from. Its acreage counts only stands that have a subcategory, so until you choose them it reads 0 and says those stands aren't counted yet.

Saving and sharing

- The plan saves as you type (*Auto-save on*, then *Saved*). There's no Save button.
- The plan belongs to the project, so everyone the project is shared with sees and edits the same plan. Someone with view-only access sees *View only*.
- If someone else saved while you were editing, the page asks whether to **Keep my version** or **Load theirs**.

MORE REPORTS

Management plans for more states are coming. Custom reports are available as an add-on.

15.6 Settings, account and support

- **Settings** shows the email you sign in with, when you last signed in, and your license: plan, status, renewal date, and whether it's your own or your organization's. Nothing there can be changed.
- **Account Management** opens the account page, where seats, billing and passwords are managed ([Chapter 13](#)).
- **Support** lists the ways to reach us ([Chapter 14](#)).

The Office pages count as your computer: you can use them while you're signed in on your phone. If the same login opens on another computer, the first one shows *This login is in use* and hands over after a countdown, or right away with **Take over now** ([Chapter 1](#)).