Terraflex
for
Regeneration Assessment Program

Terraflex App Demo
Post processing
RAP SharePoint site
FAQ

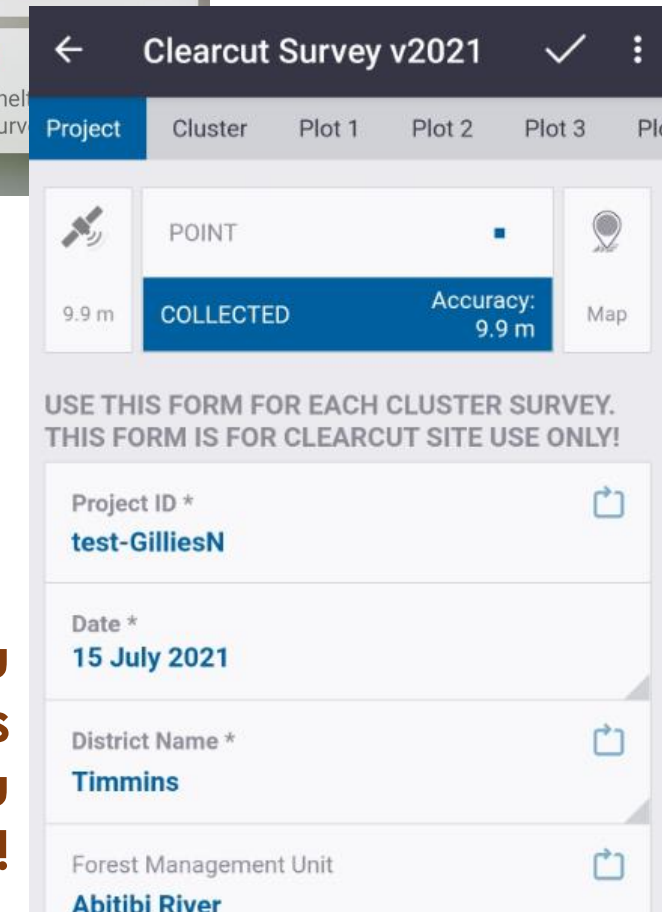Terraflex is NOT
a navigation app!

Use Avenza Maps or a
GPS device to navigate

BEFORE GOING TO THE FIELD

1. Check the **battery level** of your Tablet

2. You must **log in to Terraflex app** before going into the field. (know your username and password!)

3. Tab on Projects and **open RAP project**

4. To make sure your forms are up-to-date, go to **Menu** ☰ and tab **Sync**

5. Open the Clearcut Survey form to make sure the form opens up

6. Prepare a **map + GPS or a geoPDF map** of where you are about to go. Your map must have **Project ID** and **Cluster Numbers**
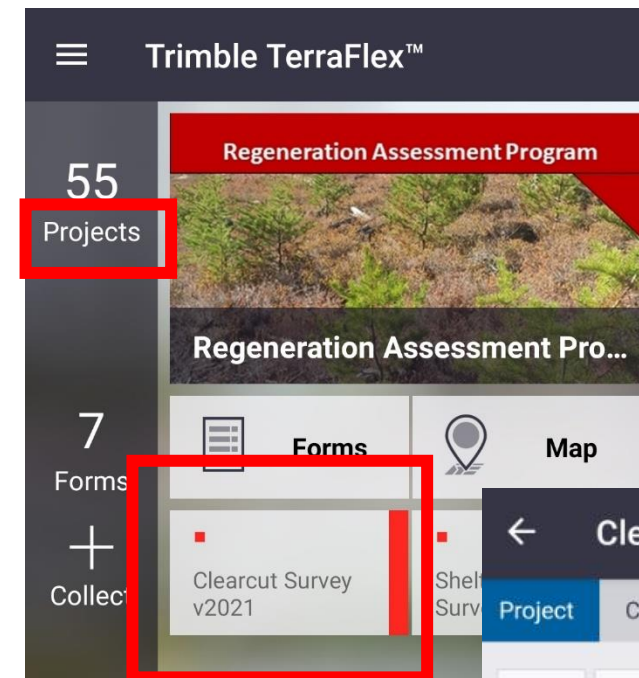
Make sure you can get to this screen before you head out !!!

# WHEN YOU ARE IN THE FIELD

1. Make sure the tablet's **GPS** is on

2. Go to the first cluster you were planning to survey

3. When you are at the plot 1 of the cluster, open Terraflex and fill out the **Clearcut or Shelterwood Survey** form**.** Use this form to **survey plot 1 to 8**.

4. Go to the next cluster

5. **Repeat 3 and 4**

You should have a map like this before going to the field!

- At the end of every survey, once you are back in an area where you have the internet, **make sure to sync your data.**
- To do this, go to **Menu** ☰ and tab **Sync**. Once the sync is complete, you should see the green banner on the top that reads "Complete"
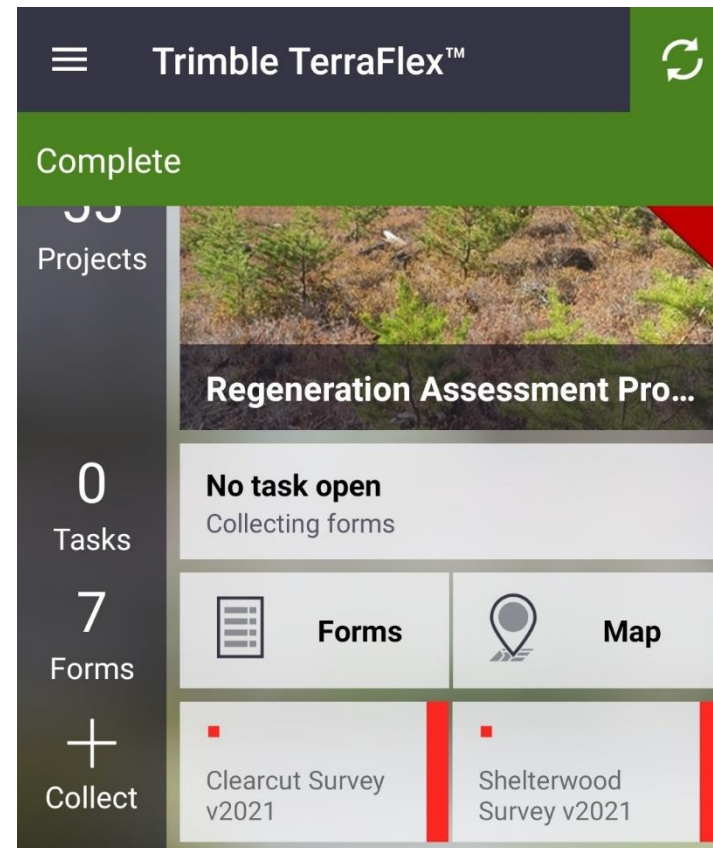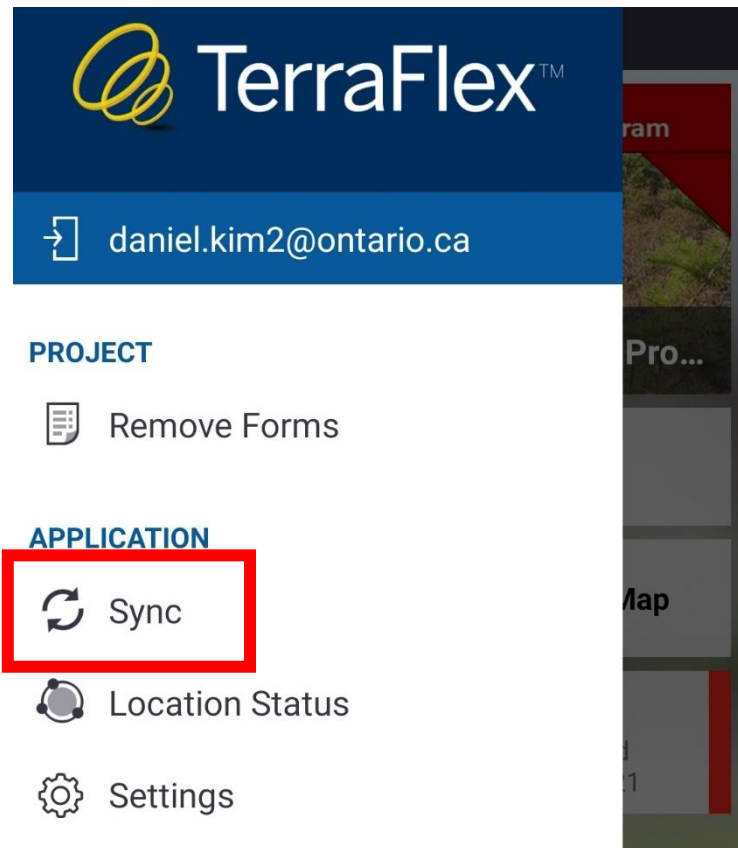
Failure to do this could result in delays or, in rare cases, data loss

Recap:

Sync before you go
Sync at the end of the day

A Demo on

How to use Terraflex to collect RAP data

Menu button (Sync)

If your screen doesn't look like this, you are probably in the wrong project. Tap "Projects" to switch to the RAP project.

Tap Forms to view or edit previously collected forms
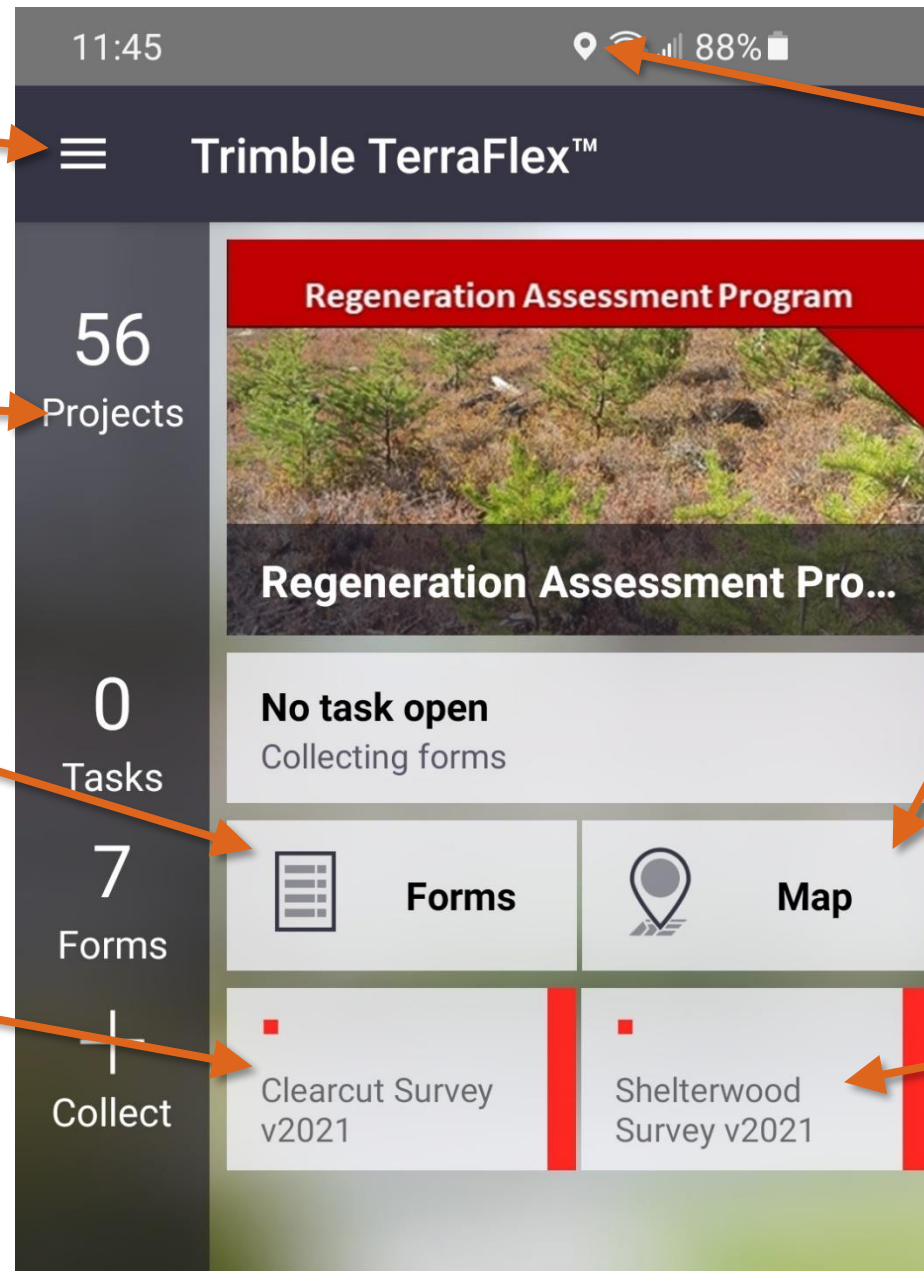
Use this form to survey **Clearcut** regeneration blocks

Make sure your GPS signal is on!!

Terraflex's Map won't give you the basemap without the internet connection. But you can still use this to check your current position relative to the points you've previously collected

Use this form to survey **Shelterwood** regeneration blocks

No Project vs Cluster form this year!
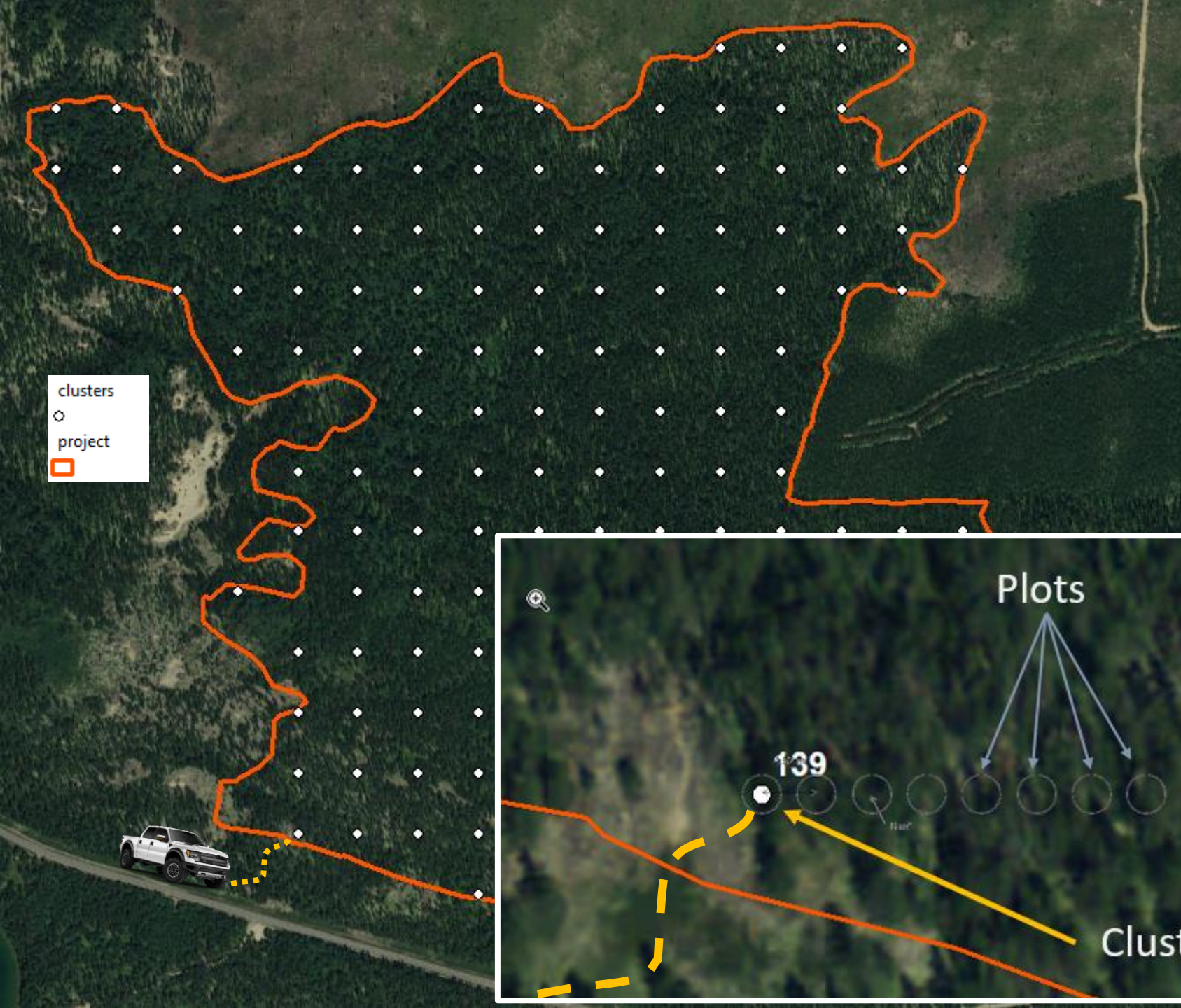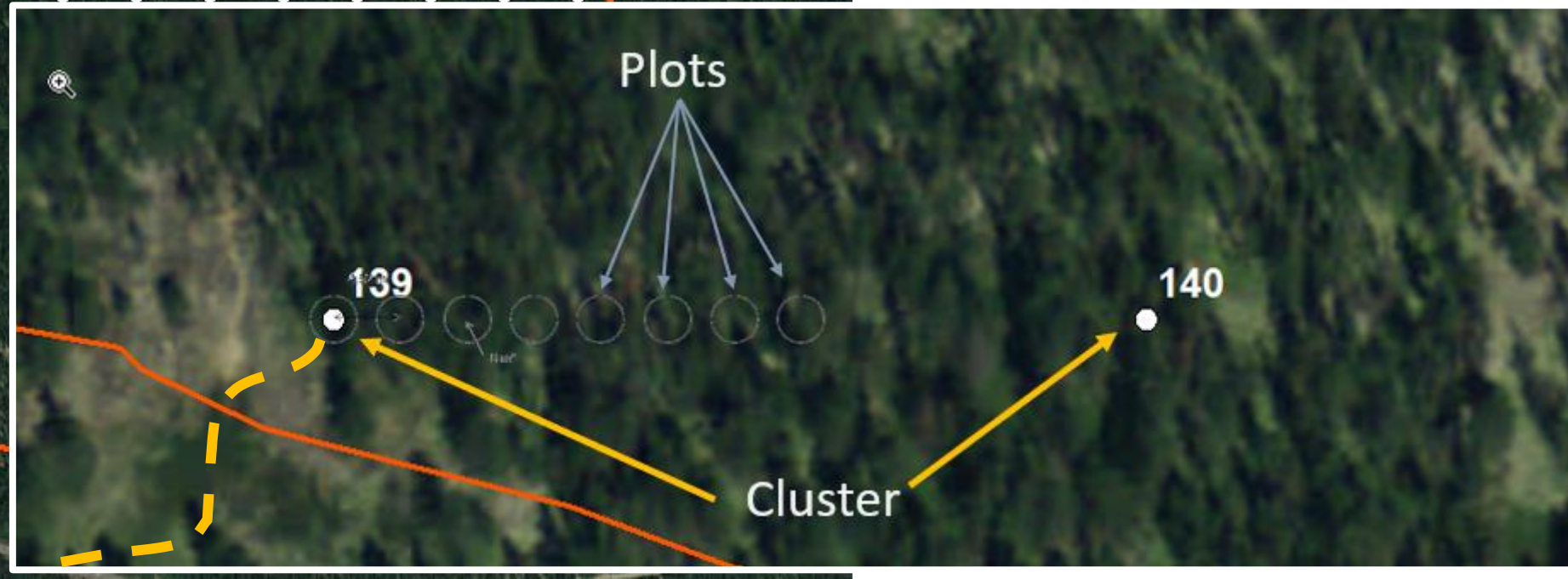
- Walk to the first (or the nearest) cluster
- When you are at the cluster, open Terraflex and fill out the survey form.
- Complete one form per cluster

clusters
◇
project
□

Plots

139

140

Cluster

Clearcut Survey Form

Use this form <mark>for each cluster</mark>

Start by collecting a **GPS point** (automatic when your device's GPS is on).

If it says "NOT COLLECTED", then check your device's GPS and try opening the form again.

This is no-good

Pick the **Project ID** from the drop-down list. It should match the Project ID given by your Forester or GIS Data Tech.

The fields with an asterisk * is a **mandatory field**. The form is not complete until you fill them out.

Most of the fields on this page are **repeating fields**. It will remember your previous inputs to save your time.

Please write your full name or email address in case we need to contact you for Terraflex or RAP updates.

Clearcut Survey v2021

Project | Cluster | Plot 1 | Plot 2 | Plot 3 | Plo

Cluster Number *
107

TAKE A PHOTO ON PLOT 1 FACING THE DIRECTION TO THE PLOT 2

Cluster Photo *

Note that Cluster Photo is a mandatory field to ensure having at least one photo per cluster.

Clearcut Survey v2021

Project | Cluster | Plot 1 | Plot 2 | Plot 3 | Plo

Unoccupied? (Plot1) *
⦿ YES ◯ NO

Unoccupied - reason (Plot1)

TREES FREE OF COMPETITION AND MEETING MIN HEIGHT REQ WITHIN 8 SQ M CIRCLE

Not Applicable

COMMENTS AND PHOTOS

Comments (Plot1)

Photos (Plot1)

If there's no regeneration tree in Plot 1 (Unoccupied = Yes), you can fill out the Reason

✓ **Unoccupied - reason (Plot1)**

Barren ◯
CC > 30% ◯
Grasses ◯
Landing ◯
Not FTG ◯
Road ◯
Rock ◯
Ruts ◯
Skid Trail ◯
Shrubs ◯
Slash ◯
Treed ◯
Untreated ◯
Wet ◯

Clearcut Survey v2021

| Project | Cluster | **Plot 1** | Plot 2 | Plot 3 | Plot |

Unoccupied? (Plot1) *
○ YES ● NO

Unoccupied reason (Plot1)

TREES FREE OF COMPETITION AND MEETING MIN HEIGHT REQ WITHIN 8 SQ M CIRCLE

Species 1 - Species Name (Plot1) *

Species 1 - Number of Trees (Plot1) *

Species 2 - Species Name (Plot1)

Species 2 - Number of Trees (Plot1)

Species 3 - Species Name (Plot1)

Species 3 - Number of Trees (Plot1)

Species 4 - Species Name (Plot1)

Species 4 - Number of Trees (Plot1)

COMMENTS AND PHOTOS

Sb (spruce, black) ○
Sw (spruce, white) ○
Pj (pine, jack) ○
Pr (pine, red) ○
Pw (pine, white) ○
Bf (fir, balsam) ○
Ce (cedar, all/any) ○
La (tamarack/larch) ○
Pt (aspen, trembling) ○
Pb (poplar, balsam) ○
Pl (aspen, largetooth) ○
Bw (birch, white/paper) ○
Mr (maple, red) ○
Mh (maple, sugar/hard) ○
By (birch, yellow) ○
Ab (ash, black) ○
Aw (ash, white) ○
Or (oak, red) ○
-- less common species below -- ○
Bd (basswood) ○
Be (beech, american) ○
Bn (butternut) ○
Cb (cherry, black) ○

If there is at least one regeneration tree, (Unoccupied = No), Species section is activated where you can tally the regen trees.

For example, if there are
1 Red Pine and
2 White Spruces, then
(assuming they are free of competition)
fill out the form as such:

TREES FREE OF COMPETITION AND MEETING MIN HEIGHT REQ WITHIN 8 SQ M CIRCLE

Species 1 - Species Name (Plot1) *
Pr (pine, red)

Species 1 - Number of Trees (Plot1) *
1

Species 2 - Species Name (Plot1)
Sw (spruce, white)

Species 2 - Number of Trees (Plot1)
2

Species 3 - Species Name (Plot1)

Repeat this for the rest of the plots

Note that there's no Residual Tree survey this year

4.52 m

8 m²
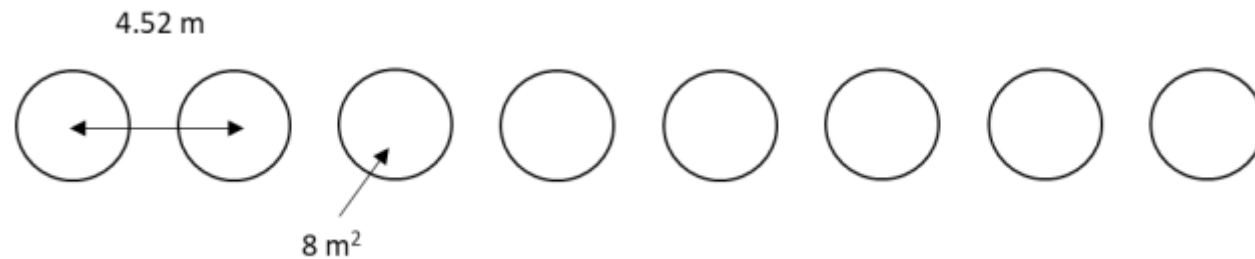
| Plot 5 | Plot 6 | Plot 7 | Plot 8 | **Ecosite** | AutoGe |

Moisture (Ecosite) *

Nutrient (Ecosite) *
Unknown

Comments (Ecosite)

Photos (Ecosite)

Moisture (Ecosite) *

- dry ○
- fresh ○
- moist ○
- wet ○
- not applicable ○

Nutrient (Ecosite) *

- Rich ○
- Moderately Rich ○
- Poor ○
- Very Poor ○
- Unknown ◉

After completing 8 plots, there's an **Ecosite** page where you can enter Moisture and Nutrient level of the cluster.

The last page of each form is called AutoGen page.

You don't need to do anything here.

But this page can be used if you want to discard or remove this record.

Terraflex don't allow permanently removing any record. But if you choose **Test Data = Yes**, then whoever analyzing the data can filter those records out.

If you are practicing or testing something, say in a parking lot, then choose **Test Data = Yes**, and this data will not be counted in the report.

By default, **Test Data = No**

Shelterwood Survey Form

The form is the same as Clearcut except when you enter the species

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Two sections:
- Regen trees within 16m^2 circle & >6m in height
- Regen trees within 8m^2 circle & <6m in height

Example:
If you have 2 Balsam Firs greater than 6m within 16m^2 circle, and
you have 2 Black Spruces and 1 Balsam Fir less than 6m within 8m^2 circle,
then fill out the form as such:

Left form column:

16 SQ M CIRCLE: RECORD TREES FREE OF COMPETITION, >6M IN HEIGHT, AND NOT RESIDUAL TREES.

Species 1 - Species Name (Plot1)

Species 1 - Number of Trees (Plot1)

Species 2 - Species Name (Plot1)

Species 2 - Number of Trees (Plot1)

Species 3 - Species Name (Plot1)

Species 3 - Number of Trees (Plot1)

8 SQ M CIRCLE: RECORD TREES FREE OF COMPETITION, <6M IN HEIGHT AND MEETING MIN HEIGHT REQ.

Species 4 - Species Name (Plot1)

Species 4 - Number of Trees (Plot1)

Species 5 - Species Name (Plot1)

Species 5 - Number of Trees (Plot1)

Species 6 - Species Name (Plot1)

Species 6 - Number of Trees (Plot1)

COMMENTS AND PHOTOS

Right form column:

16 SQ M CIRCLE: RECORD TREES FREE OF COMPETITION, >6M IN HEIGHT, AND NOT RESIDUAL TREES.

Species 1 - Species Name (Plot1)
Bf (fir, balsam)

Species 1 - Number of Trees (Plot1)
2

Species 2 - Species Name (Plot1)

Species 2 - Number of Trees (Plot1)

Species 3 - Species Name (Plot1)

Species 3 - Number of Trees (Plot1)

8 SQ M CIRCLE: RECORD TREES FREE OF COMPETITION, <6M IN HEIGHT AND MEETING MIN HEIGHT REQ.

Species 4 - Species Name (Plot1)
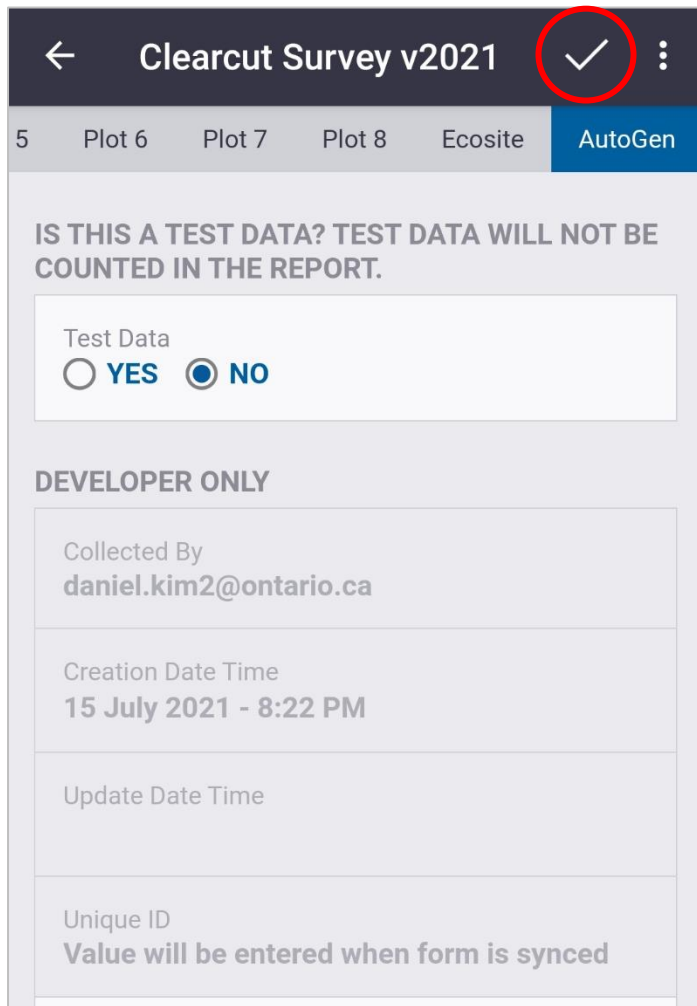**Sb (spruce, black)**

Species 4 - Number of Trees (Plot1)
2

Species 5 - Species Name (Plot1)
Bf (fir, balsam)

Species 5 - Number of Trees (Plot1)
1

When you are done, tab on the checkmark to save and exit the form.

←   **Clearcut Survey v2021**   ✓   ⋮

| 5 | Plot 6 | Plot 7 | Plot 8 | Ecosite | AutoGen |

IS THIS A TEST DATA? TEST DATA WILL NOT BE COUNTED IN THE REPORT.

Test Data
○ YES ● NO

DEVELOPER ONLY

Collected By
daniel.kim2@ontario.ca

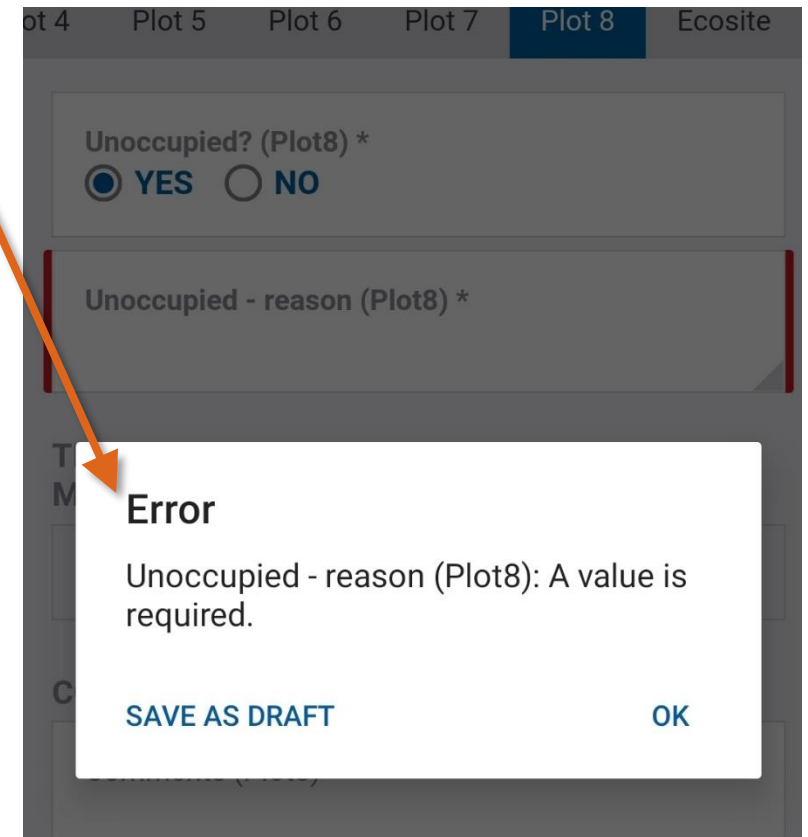Creation Date Time
15 July 2021 - 8:22 PM

Update Date Time

Unique ID
Value will be entered when form is synced

If you haven't filled out all the mandatory fields, an error message will pop up.

Tab **OK** to go back and fill out the field.

Note that if you **SAVE AS DRAFT**, the form is considered incomplete, and the data will remain on your local device.
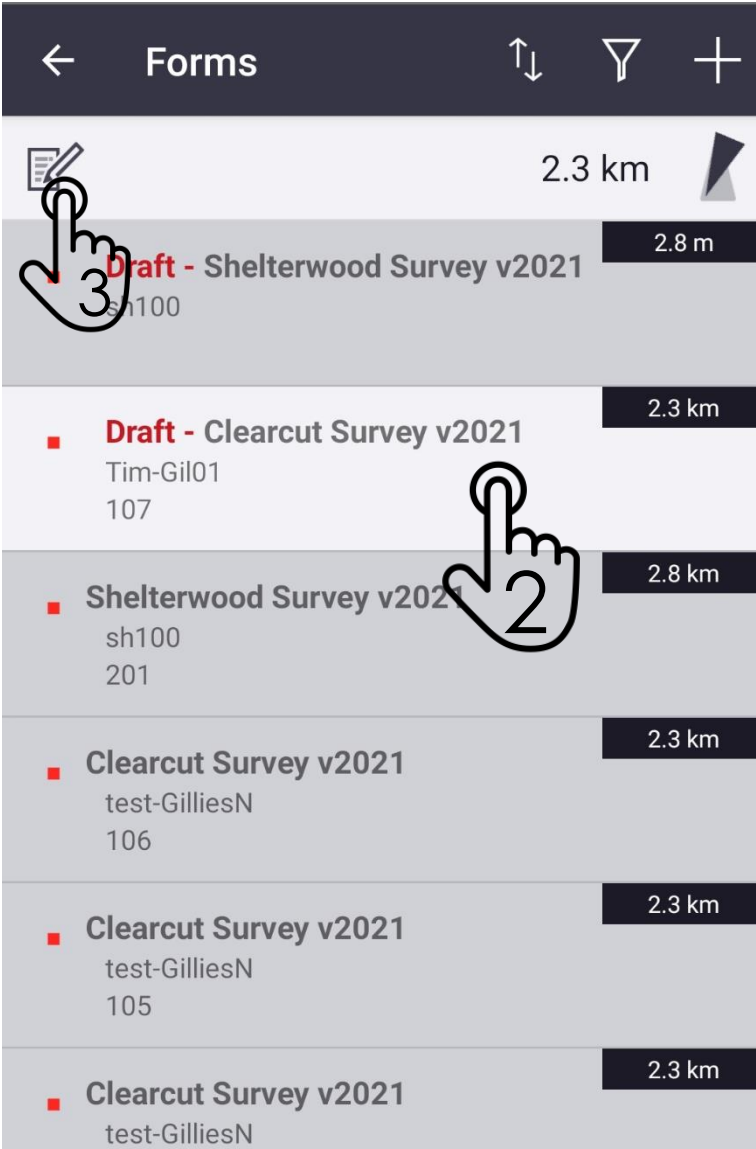

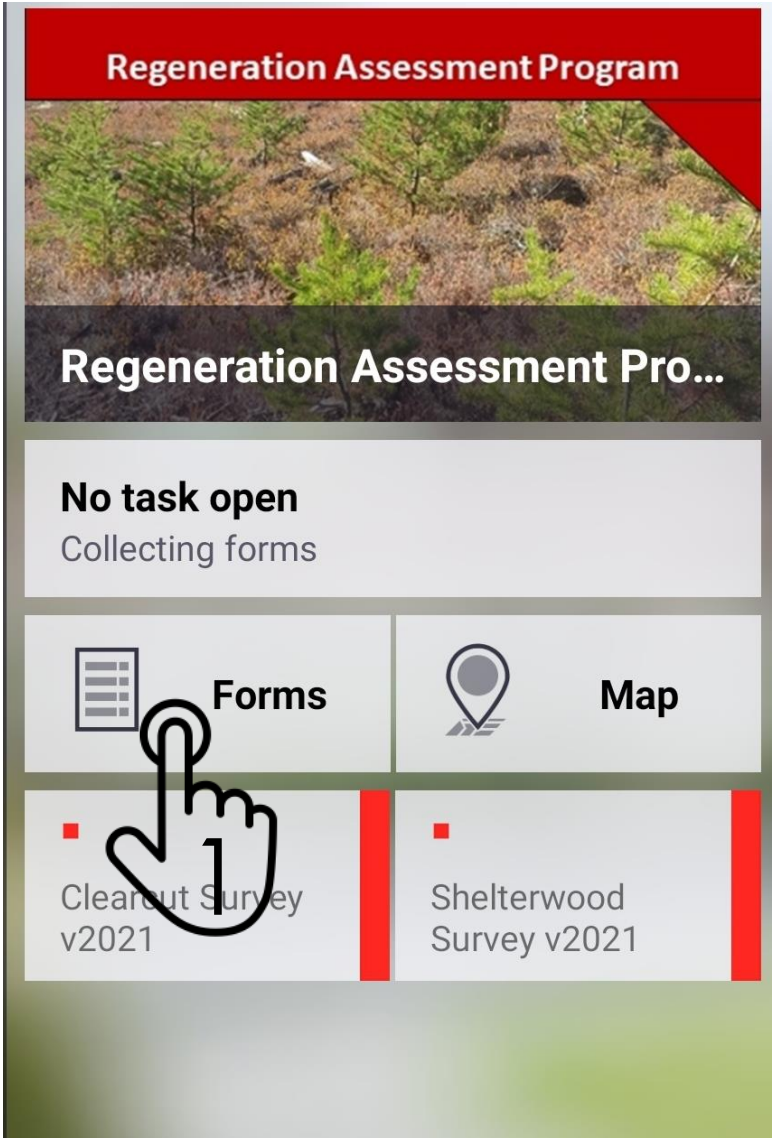| ot 4 | Plot 5 | Plot 6 | Plot 7 | Plot 8 | Ecosite |

Unoccupied? (Plot8) *
● YES ○ NO

Unoccupied - reason (Plot8) *

Error

Unoccupied - reason (Plot8): A value is required.

SAVE AS DRAFT   **OK**

HOW TO GO BACK AND EDIT

- At the end of every survey, once you are back in an area where you have the internet, **make sure to sync your data.**
- To do this, go to **Menu** ☰ and tab **Sync**. Once the sync is complete, you should see the green banner on the top that reads "Complete"
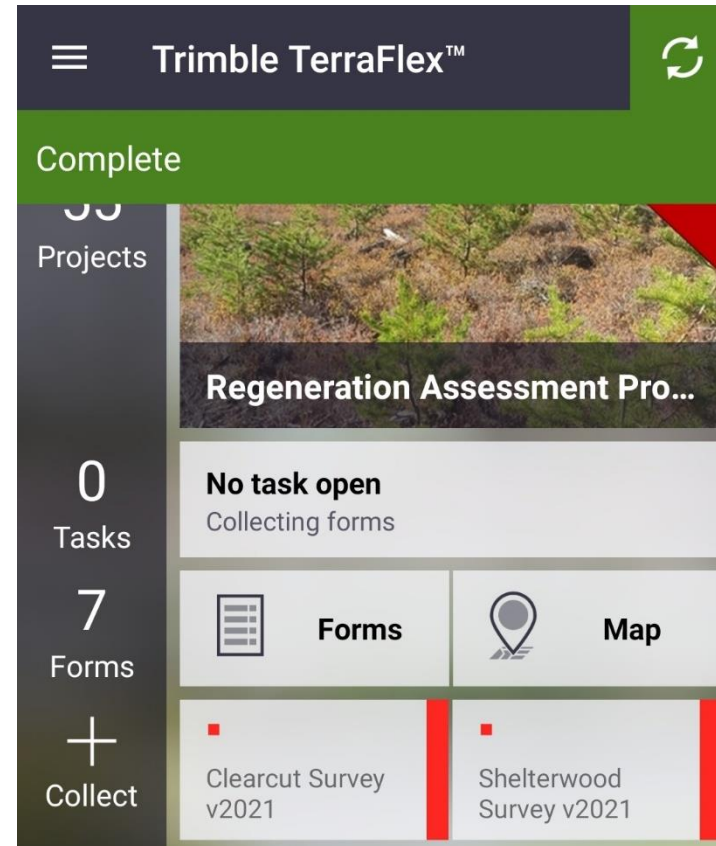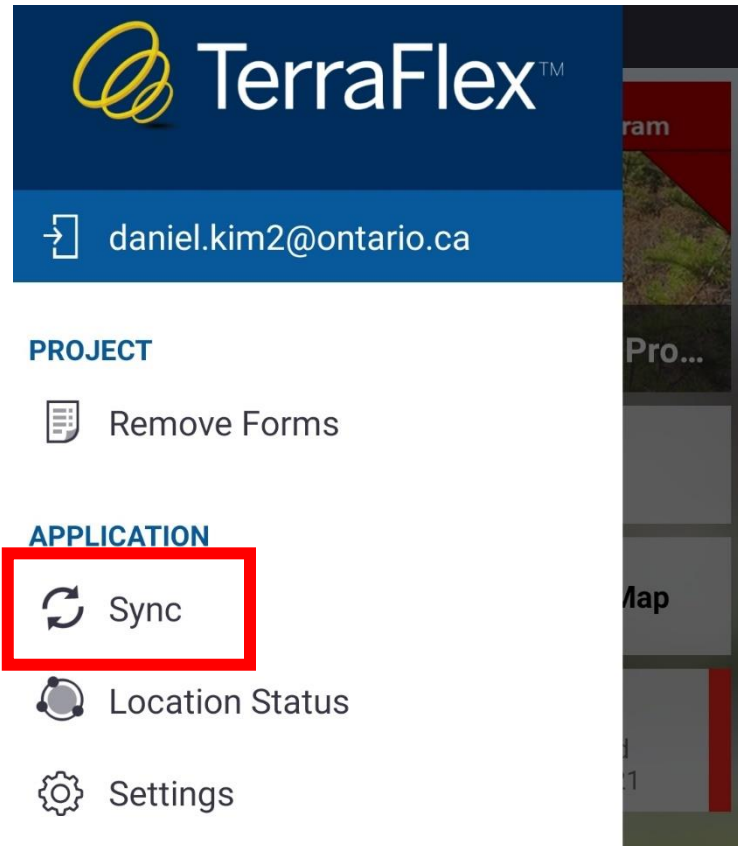
Failure to do this could result in delays or, in rare cases, data loss

What happens next?

Dashboard and Report on Sharepoint

All TerraFlex users on iOS, Android and Windows 10 must update to the latest version, v5.4, before the 1st of September 2021. After this date users of older versions will not be able to sign in or synchronise. Users of TerraFlex on Windows Embedded devices, such as the Trimble GeoExplorer and Trimble Juno, must follow an account federation process to enable their software to continue working after the 1st of September. Click the 'Find out more' link for more information.

Frequently Asked Questions

Q. Can I use my work phone to collect data?

A. No, unless you have no other choice. When you use a single Terraflex license on a multiple devices, there's a chance your account will be locked and we will need to contact Trimble to unlock the account. If you lost your tablet or is malfunctioning, try find another tablet that already has Terraflex on. Work phone can be used for Terraflex but it should be the last option. Having said that, it's still a good idea to bring your work phone to the field just in case.

Q. My tablet's GPS doesn't work. Can I still use it?

A. It's not recommended but it's possible. Make sure you fill out the Project ID value correctly for each clusters otherwise there's no way of telling to which project each record belongs. It is strongly recommended to use a tablet with GPS capability.

Q. I got logged out of Terraflex while in the field. What do I do?

A. Terraflex needs the internet connection to log back in (once you are logged in, you don't need the internet). If this happens in the field (and if you know the account email and password), rather than going all the way back to the office, drive to an area where your work phone's internet works. You can use your phone as a wifi hub to provide internet to your tablet. Here's how:

For iPhones:
    go to Settings – Cellular – Personal Hotspot – ON

For Android phones:
    go to Settings – Mobile Hotspot and Tethering – Mobile Hotspot – ON

In both devices, you can edit the password of the hotspot (or use the default password).

Once hotspot is on, connect your tablet (the one with Terraflex) to the hotspot through Wifi connection. Once connected, you should be able to log back into Terraflex and continue your survey.
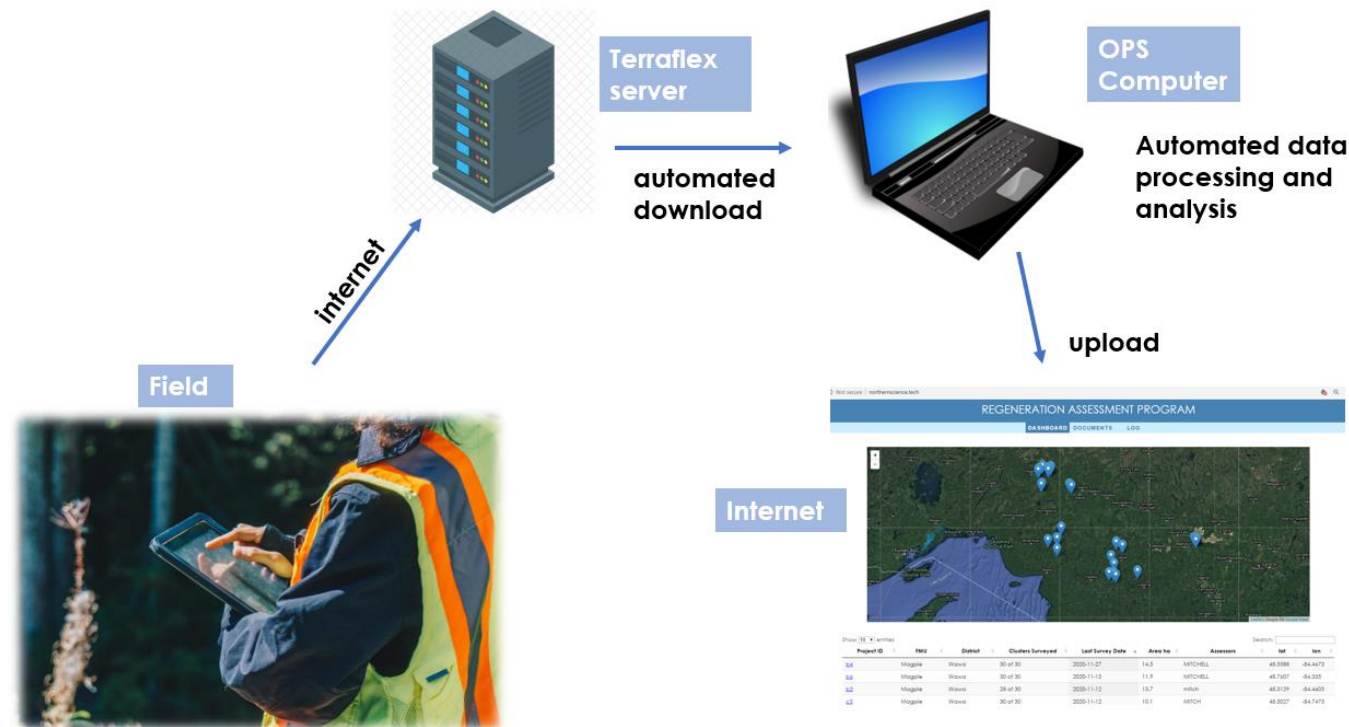
Q. I've entered the Species Name by mistake and there's no option to undo this

A. You can put number of species = 0 and that species won't be counted.

Q. Where does the data go once sync'ed and where do I check the results?

A. Once synced, the data (including the pictures) will go to the Terraflex server. This data can be viewed directly on the Terraflex website. A RIAU staff will download the data and post-process it into a webpage on sharepoint. The end-result will look similar to last year's webpage.

You can look at the last year's result here: https://ontariogov.sharepoint.com/sites/MNRF-ROD-EXT/RAP/SitePages/RAP/2020/dash.aspx

https://ontariogov.sharepoint.com/sites/MNRF-ROD-EXT/RAP