

Citizen Science Field Data Collection

ONE TIME SETUP - Get an Account and Download Arc Collector

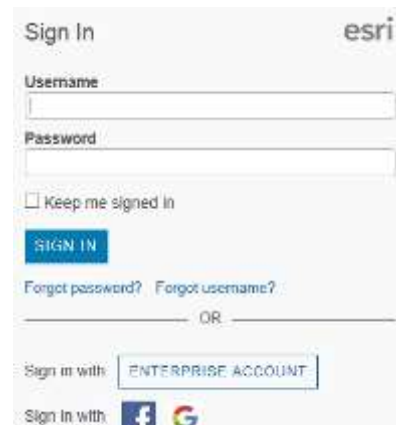
- User must have a **FS AGOL partner account**
If you do not have a FS AGOL citizen science account (it must be a FS account), please contact [Greg McNamee](#) to request your new account
- When you get your new account, you will receive an email with instructions on how to connect, follow the instructions in the email, to connect to your FS Partner AGOL account, and setup your password
- On your mobile device (phone or tablet):
 - Ensure you are connected to a WIFI connection
 - Go to your APP STORE (Google Play Store on Android), Search for **Arc Collector**, download the Arc Collector application to your mobile device. Collector is preferred over Collector Classic, the instructions below are for Arc Collector. You will need your APP STORE password.

Launch Arc Collector & Login (one-time)

If it's been several months since you installed Arc Collector, it's strongly recommended to go to your app store and check to see if there is an update that you should install. Always use the most current version.

IMPORTANT: You must login with your **FS partner Account** each time you begin to collect data

- Open the application on your mobile device
- If asked if you want to allow the application to use your location, select **Allow**. If you select no, you will not be able to use your GPS location.
- Enter your AGOL username and password





Download the appropriate Map

IMPORTANT: You must be logged into a WiFi connection to download the maps

- One Collector and tap the 3 horizontal lines in the upper left corner of the screen, select USFS Region 04, Boise National Forest – Citizen Science, tap the refresh button on the table to see all of the maps shared with the group - tap the desired map
- At this point you will be prompted to define your work area, zoom to the area you will be working on then tap Download Area
- If you side loaded a background map, you can turn it on by tapping the three dots in the upper right corner, select Basemap, then select the map you loaded onto your mobile device

To Collect Data

- Open the Arc Collector application
- From the maps page, tap the 3 dots in the upper right corner and select Settings
 - Ensure that GPS averaging is ON and that the number of locations is set to 10
 - Ensure Accuracy is set to 30 ft
 - Ensure Units of Measurement is set to Imperial

- Tap the word Collector in the upper left corner to close this page
- Before going to the field, take your device outside so that you are receiving a good GPS signal and test the locational feature on the map  to ensure the application is using your GPS location. If the app returns your current GPS location it's working. If it doesn't return your location, you may have told the app not to use your location, find the app in your settings and allow it to use your location.
- You are ready to go to the field to collect data!
- From the maps page, tap the map to open it
- Many times the Collect New menu is open and nothing shows on the map due to being zoomed in too far;
 - close the Collect New menu by tapping the up arrow in the upper right
 - zoom out and navigate to your work area, zoom in as appropriate
- To collect a photo point:
 - Zoom to a photo point, note the photo point number and tap the point
 - This brings up the Feature dialog box, tap the dark triangle in the lower right part of the PhotoPoint listing
 - Select Show details, this brings up the prompt Enter Photo Point Data
 - Tapping the Enter Photo Point Data link opens the Survey123 My Surveys page, tap Boise NF – Photo Points (if you have not previously downloaded the survey to your device)
 - Tap the Collect icon in the lower left corner of the screen
 - This brings up the photo survey form
 - Take a photo using the 360 degree camera
 - Navigate to the folder indicated and select the photo you just collected
 - Enter the full name(s) of the surveyor(s)
 - The photo point number is displayed as is the strata
 - Select the appropriate slope position using the graphic as a guide
 - Measure the tree basal area to the nearest inch
 - Add any comments you feel are needed to complete the form
 - Tap the green check mark  in the lower right hand corner to finish the survey record
- To collect road condition data follow the instructions in the Citizen Science Road Condition Data Collection pdf
- To collect large tree data:
 - Navigate to the transect using either Avenza or Arc Collector (Large Tree Survey)
 - Following the protocols, begin navigating down the transect, once a large tree is identified, open the Large Tree Survey Survey123 form
 - Tap the Collect icon at the bottom of the screen
 - Tap the transect you are on
 - Use the internal GPS to record your location
 - If your internal GPS records elevation as well, it will be displayed
 - Enter the full name(s) of the surveyor(s)
 - Record the tree number
 - Indicate if the tree has any paint markings
 - Indicate the species: ABGR for Grand Fir; PIPO for Pondarosa Pine; or PSME for Douglas Fir
 - If PIPO or PSME are selected, additional questions will be presented; under Crown Form there is a picture to the right of each selection to assist you, tap the picture to get a larger view
 - Measure the DBH of the tree to the nearest 0.1 inches

- Using the Score displayed at the bottom of the PIPO or PSME group of questions and the DBH value, or the DBH value in the case of Grand Fir, indicate if the tree can be considered a legacy tree or not
- Use the laser range finder to measure the distance, to the nearest foot, the distance to the first live foliage and the lowest dead branch
- Indicate the relative vigor of the tree
- Take a photo of the tree with the smart device and enter a caption for the photo
- Add any additional comments you feel are needed
- Tap the green check mark ✓ in the lower right hand corner to finish the survey record
- If you are using one of the Boise National Forest Samsung tablet, you will not be able to upload your data until you have a WiFi connection
- If you are using a personal device that has a cellular data plan, and you are out of cell coverage, be sure to upload your data when you return to a location with cell coverage
- PLEASE do not forget to upload your data at the end of each day