Viewing Form Responses in Tables and Maps

Epicollect Data Options & Export to Google Maps

3 - Visualizing Epicollect Data in Tables & Maps

Visualizing Field Form Data on the Web

Field data can be viewed, edited (depending on user permissions) and exported from the Epicollect website. This exercise will showcase methods for interacting with form responses and exporting the data to a .CSV file which can be imported into Google Maps.

Viewing Form Responses on the Epicollect Website

Once you start collecting data in the field using the Epicollect5 mobile app, the data will be stored on the Epicollect website.

Viewing Epicollect Project Data in a Web Browser

1. To begin viewing a project's data, navigate to http://five.epicollect.net in your web browser.

2. On the upper right side of your screen select **Find Project**.

3. Unfortunately, there is no text search function on the Epicollect website, you have to find the project in the list of projects. To find the Water Quality Monitoring Project, select **Science**.

4. Locate the "Water Quality Monitoring" project and select **View**. (Hint look for the NRCA Logo.)

   Note: This project is listed as public and unhidden so it can be found in this way. If it was listed as private or hidden it would not appear in the project gallery and you would need the project web address to view the data. The direct url for this project is: https://five.epicollect.net/project/water-quality-monitoring
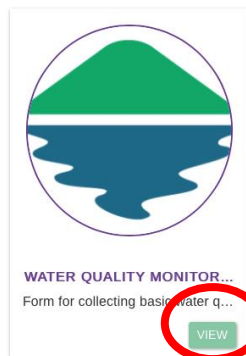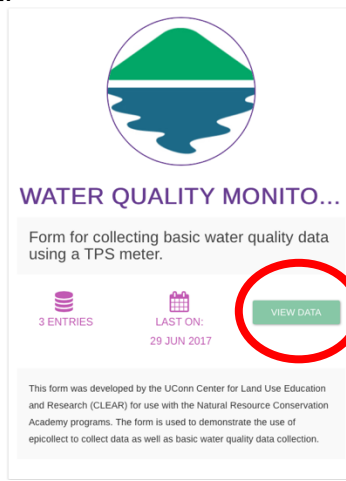
5. The Water Quality Monitoring project page will open. To view the data collected using this form, select **View Data**.

WATER QUALITY MONITO...

Form for collecting basic water quality data using a TPS meter.

3 ENTRIES   LAST ON: 29 JUN 2017   VIEW DATA

This form was developed by the UConn Center for Land Use Education and Research (CLEAR) for use with the Natural Resource Conservation Academy programs. The form is used to demonstrate the use of epicollect to collect data as well as basic water quality data collection.

6. A table will open displaying all of the data collected using this project form.

7. You can view the data by scrolling to the right or view an individual record by clicking on the eyeball. **Pick one to view**.

View	Title	Created At	Your Name (or Team Name)	Stream Name	Stream Location	What is the weather like?	
👁	Roberts brook -Ag	29th Jun, 2017	Dave	Roberts brook -Ag	41.812735, -72.240473	cloudy, hot	S
👁	Forest fenton	29th Jun, 2017	Dave	Forest fenton	41.833245, -72.24297	cloudy, hot	M
👁	Urban Eagleville	29th Jun, 2017	Dave	Urban Eagleville	41.809136, -72.261304	cloudy, hot	S

Viewing Data on a Map

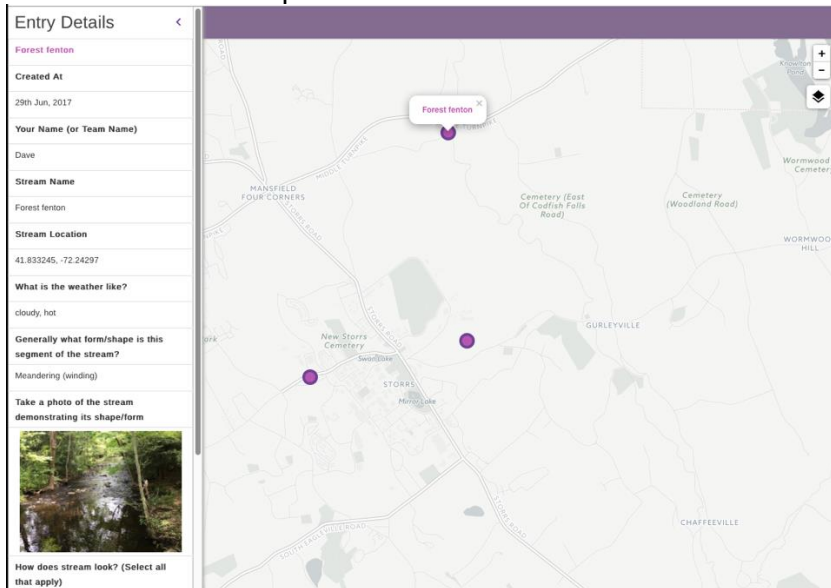8. To view the data geographically, select **Map** at the top of the screen.

⬇ Download   ⊞ Table   🌐 Map

9. All data collection points will then appear on a map.
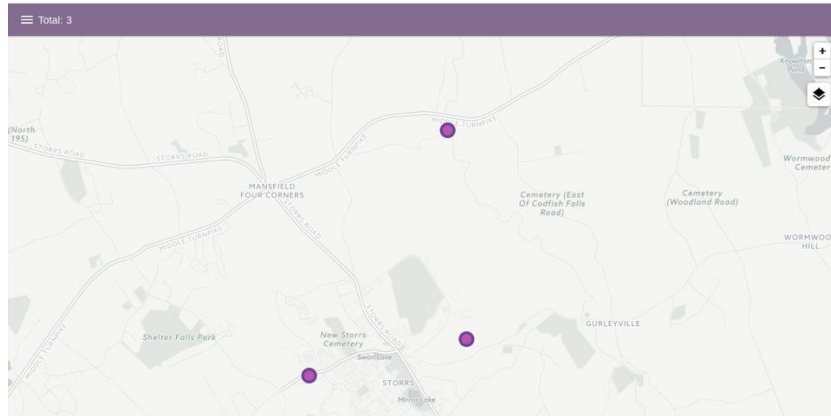
10. To view individual data points, **click on one of the dots**. A column will open on the left with the data collected at that point.

11. Note: If you collected data points close together, you will see a bigger dot with a number in it. This means there are several data points collected in the same area. **Click on the number dot** to open the individual points and then click on each of the individual dots to view the data collected.

12. To change your basemap, select the **layers button**.

13. Explore the different basemap options and **select one** that suits your fancy.

14. The Epicollect map also allows you to filter your data. This can be useful if you have multiple data points, but only want to see ones with a certain characteristic. To filter your points, select the **filter button**. Note, you may have to close the Entry Details panel if it is open to see the filter icon.
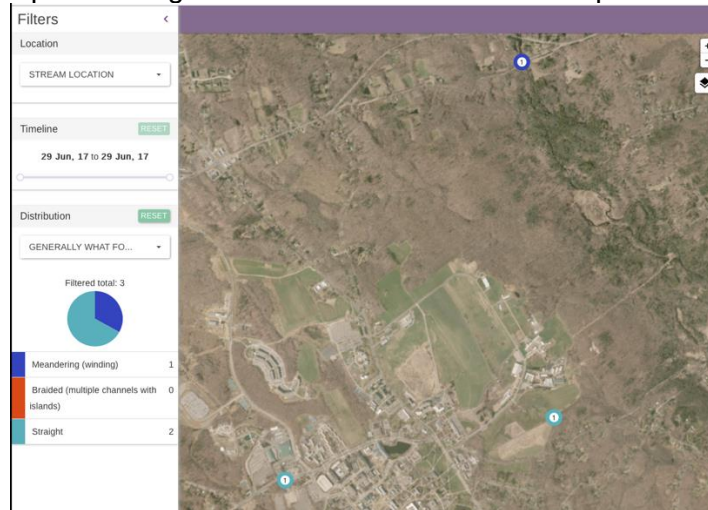
15. Note that you can select different locations or different dates.

16. Under **Distribution** in the filter menu, use the dropdown arrow to **select one of the survey questions** to filter the data by.
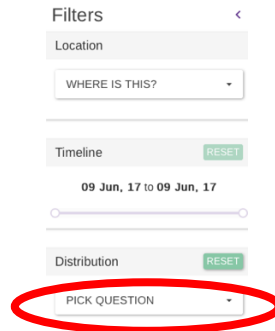
17. Note that once you select a question to filter the data by a pie chart will appear and the dots on the map will change based on the answers to the question selected.

18. Note that this map is public so anyone with the project url can view or download (but not edit) the data. To share the data with friends, send them the project website url.

19. The data map in Epicollect may be good enough for your purposes. However in some cases you may want to combine this data with other data or customize how it is displayed. In the next step you will learn how to do this by importing your data into Google Maps. For the next steps, keep you current browser window open.
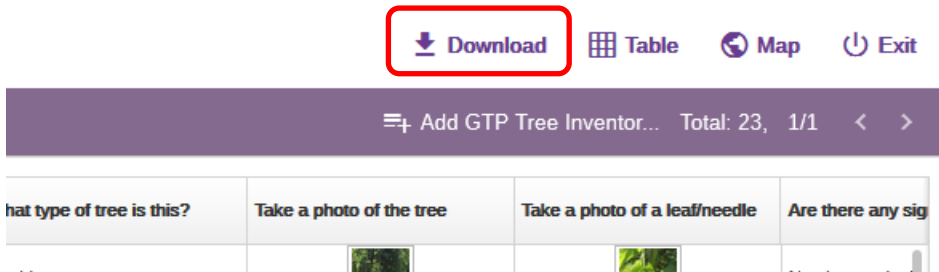
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Adding Field Form Data to Google Maps

If a project is listed as public on the Epicollect website, anyone can download the data.

Exporting Form Data from Epicollect

1. Click on the **Download** icon in the upper right corner of the screen.

2. A "**Download**" panel will expand from the left side of the screen. Be sure the **Format** is set to **CSV** and click **Download**.

3. A download window will appear. **Save the file** to your **USB flash drive** or **hard drive** of your computer. The name of the file will be the form name. The file is a compressed (.zip) comma separated values (.CSV) file. Before we can bring it into Google Maps, you will need to unzip it. Select **Save File**. Click **OK**.

4. On your computer, **view/navigate to the folder** where you saved the .zip file. **Right click** on it and **unzip** to in the same location. Mac people…just double click!
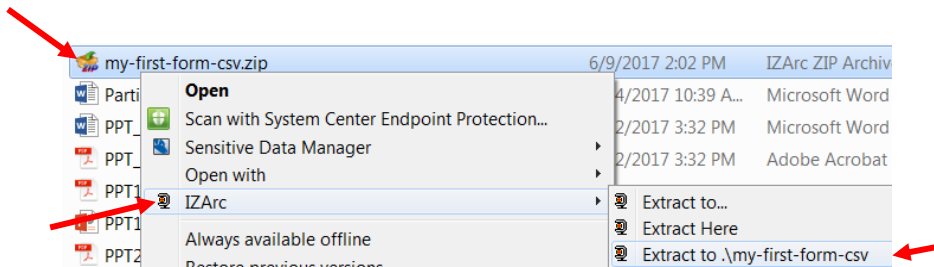

⚠ **Note:** Your extract tool may look different than this! Mac people…just double click!

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## Working with Comma Separated Values (.CSV) Data

Comma separated values (.CSV) files allow data to be saved in a table structured format within a text file. The file contains the tabular data separated by commas. Each line of the file is a data record. Each record consists of one or more fields, separated by commas. The CSV file you just downloaded can be opened in a text editor or in as a spreadsheet in Excel. It can also be imported into a number of other programs – including Google Maps!

.CSV in a text editor (Notepad)

.CSV in Excel
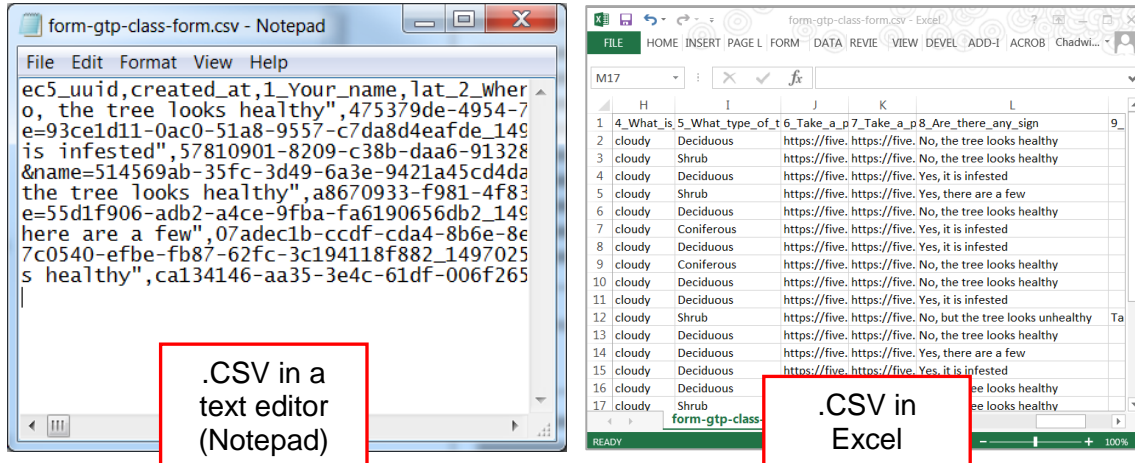
⚠ **Pro Tip:** For this exercise, we will import the .CSV file directly into Google Maps. However, it may be handy to know that the file can be edited in Excel BEFORE you import it into Google Maps. You may want to try this in the future (i.e. when you have more time). That's because editing .CSV tables in Google Maps is somewhat restricted. You'll see this in a minute.

Import EpiCollect .CSV into Google Maps

5. **Open Google Maps** (http://maps.google.com).
6. **Sign into** your Google account, if necessary.
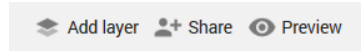7. Click on the **Menu icon** in the Search bar and select **Your Places**.
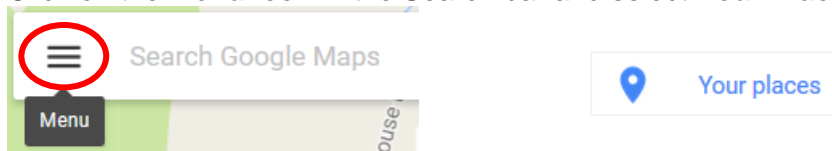
8. In the **Your places** panel, click on **MAPS**. You should see your saved map(s) listed below. Let's create a new one.

9. Click **CREATE MAP** at the bottom of the **Your places** panel. Google My Maps will open a blank, **untitled map**.

CREATE MAP

10. Under **Untitled layer**, click **Import**.

11. In the **Choose a file to import** window, click on "**Select a file from your computer**" and browse to the location where you saved your Epicollect .CSV file.

Before Google Maps can add the layer to the map, it will need to know which fields in the spreadsheet contain the geographic coordinates of your form data, as well as what field will be used as the pop-up title.

12. In the "**Choose columns to position your placemarks**", check the box next to "**lat_2_Stream_Location**" and click the radio button next to **Latitude**.
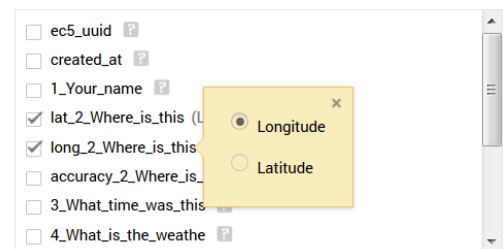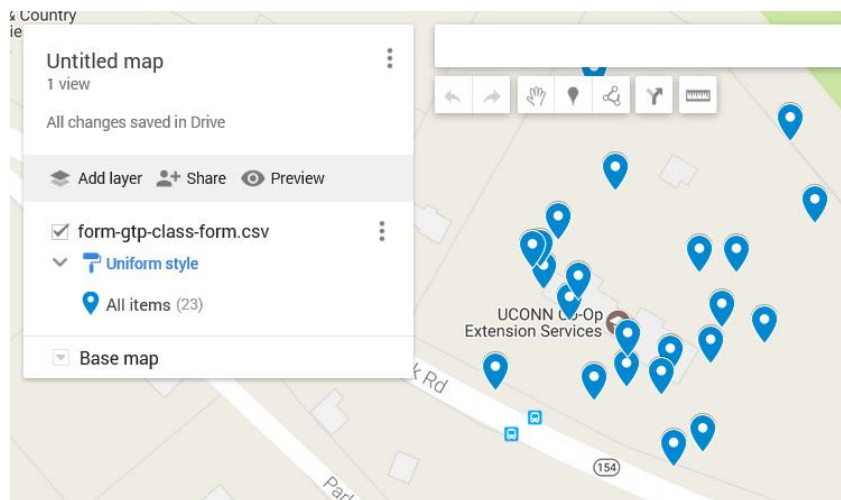
13. Next, check the box below it, "**long_2_Stream_Location**" and click the radio button next to **Longitude**.

14. Click **Continue**.

15. In the "**Choose a column to title your markers**" (title for the placemarks), select the radio button next to "**2_Stream_Name"**.

16. Click **Finish**. Once the import is complete, you should see the locations of the form entries on the map.
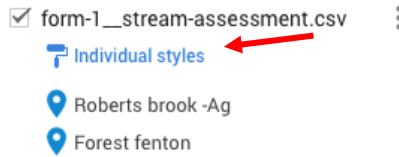
Customizing Your Google Map

Your form data will be added to your map using a uniform style. We can symbolize the points based on the data collected in the form. Let's take a look.
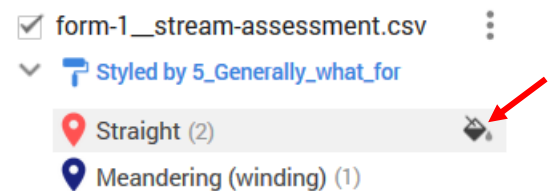
17. Click on **Individual styles** under the **layer name**.
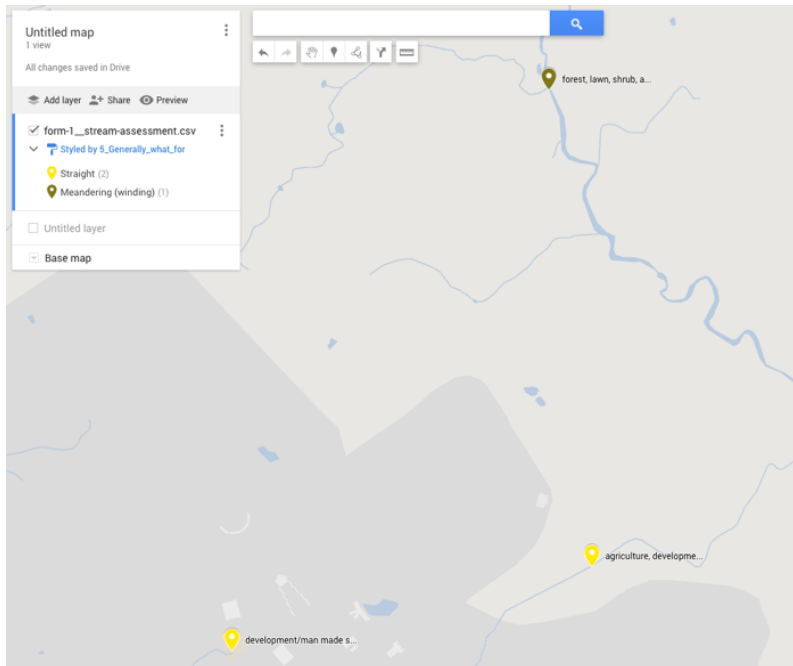

18. Change the **Group places by** to "**5_Generally_What_For**" and change **Set labels** to "**9_What_land_uses_sur**". **Close** style window by clicking the **x** in the upper left.
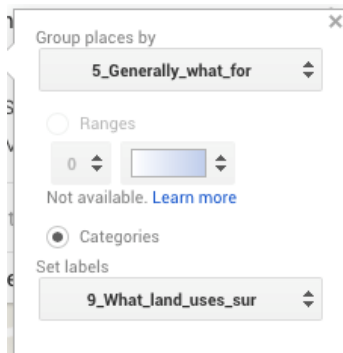
19. If you'd like to change the color of any of the classes, hover over the waypoint class name and click on the **paint can icon** that appears to select different colors/icons.

Format the Pop-up Window

20. **Click on a marker** on the map. The pop-up window will open. Notice the field names and values come directly from the EpiCollect table.

⚠ Unfortunately, there is currently no way to edit the names of the fields in Google Maps. If the field names bother you, you can edit them in Excel <u>before</u> you import the .CSV file into Google Maps.

21. Notice there is a **link to the photographs** in the pop-up. Try clicking on one. You should see the photo open in a new tab of your browser. This is helpful, but maybe not entirely ideal. Let's add those photos directly into the pop-up window.

Roberts brook -Ag ✕

ec5_uuid	e785434d-ad0e-d70e-b888-9fef22fa68
created_at	2017-06-29T18:54:53.125Z
1_Your_Name_or_Team_	Dave
lat_3_Stream_Location	41.812735
long_3_Stream_Location	-72.240473
accuracy_3_Stream_Lo...	10
4_What_is_the_weathe	cloudy, hot
5_Generally_what_for	Straight
6_Take_a_photo_of_th	https://five.epicollect.net/api/media/w monitoring? type=photo&format=entry_original&na 4d-ad0e-d70e-b888- 9fef22fa6883_1498762327.jpg
7_How_does_stream_lo	No value
8_Describe_other_res	No value
9_What_land_uses_sur	agriculture, development/man made s (pipes, bridges, structures)
10_Take_photos_of_th	1
12_What_evidence_of_	erosion, trash
13_Provide_photos_of	1
15_Please_indicate_a	No value
16_Please_specify_ot	No value

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UNIVERSITY OF CONNECTICUT

CLEAR
Center for Land Use Education & Research

22. Return to your map. **Click on** the **marker again**, if necessary, to view the pop-up window. **Click on** the **pencil icon** to edit the contents of the pop-up.

23. With your mouse, **select the entire text string** in the "**Take_a_photo_of_th**" field. Pro tip: double-click on the text in the box to select all.

24. With the text string selected, **right-click** and **copy** it.

25. Click on the **camera icon** at the bottom of the pop-up.

26. In the "**Choose an image or a video**" window that appears, click on **Image URL** at the top of the window. Right-click and **paste** in the image URL. The photo should appear. Click **Select**.
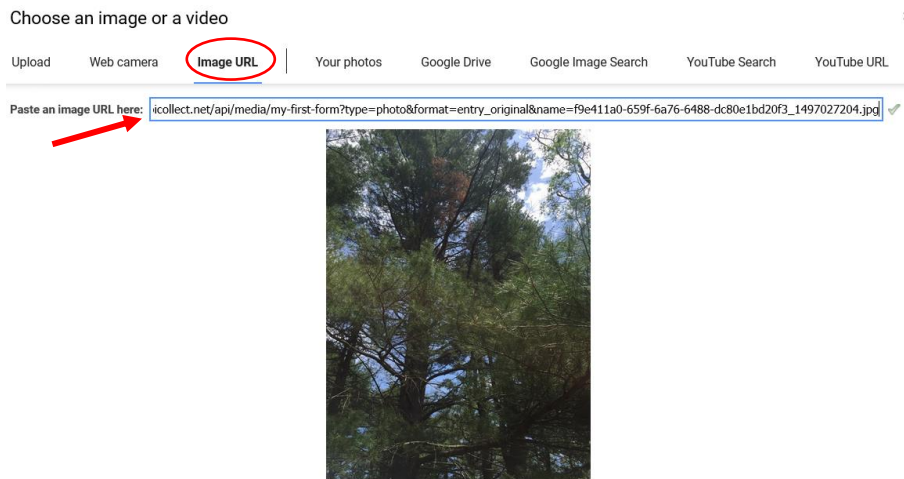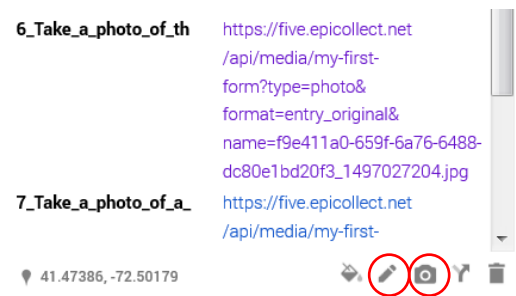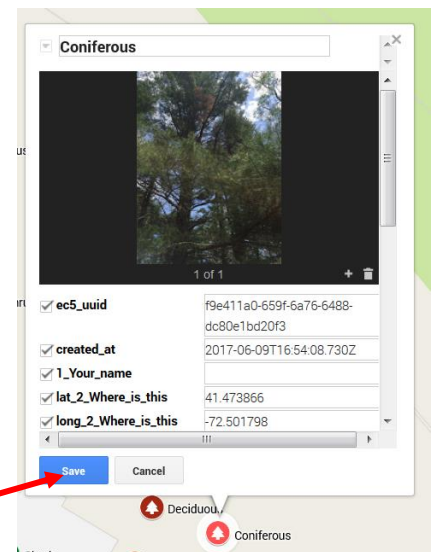
27. Once the window closes, you should see the image embedded at the top of the pop-up window. If you like **uncheck the box next to "6_Take_a_photo_of_th"**. This will hide the photo URL in the pop-up.

28. Click **Save** to save the changes you made to the pop-up.

29. If you're feeling adventurous, **repeat the process** with the photo URL in the "**Take_a_photo_of_a_**" field. Be sure to click the **Save** button at the bottom of the pop-up each time you make a change.

30. If you're feeling REALLY adventurous (and you have time to spare), go ahead and add photos to the pop-ups for other markers.

Clean Up Your Map

Now that you're a pro at editing and customizing a Google Map, use your new skills to clean up your map. Some suggestions:

31. Update the layer name
32. Give your map a title and description
33. Add other layers
34. Change the marker style
35. Format the pop-ups further
    o Note that you can uncheck the box next to the name of a field in the pop-up. This will hide it so that it will not show. It may be helpful to do this for some of the fields that are not necessary to display in the pop-up. Don't hide the photo link fields until AFTER you are done embedding photographs (or else you will not have access to the URL).

Have fun. Go forth and make beautiful maps!