



**BUTTERFLY
PAVILION**

Colorado Butterfly Monitoring Network Mapmaking Instructions

Last updated on July 8, 2024



Google Map Instructions

Creating a Google Account

If you do not have a Google account, please create one by following the steps below.

1. Start at www.google.com
2. Create a Google account by selecting **Sign In** in the top right corner, then select **Create an Account**
3. Create a username and password; remember to record your information for future reference!
4. Continue the instructions below to create a Google Map

Creating a Google Map

1. Begin at www.google.com and sign into your account
2. Find the **Apps Tab** (top right, near your name icon, looks like nine dots in a square shape) and select.

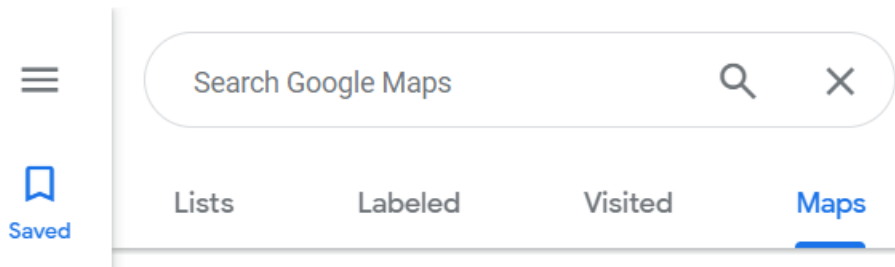
Gmail Images



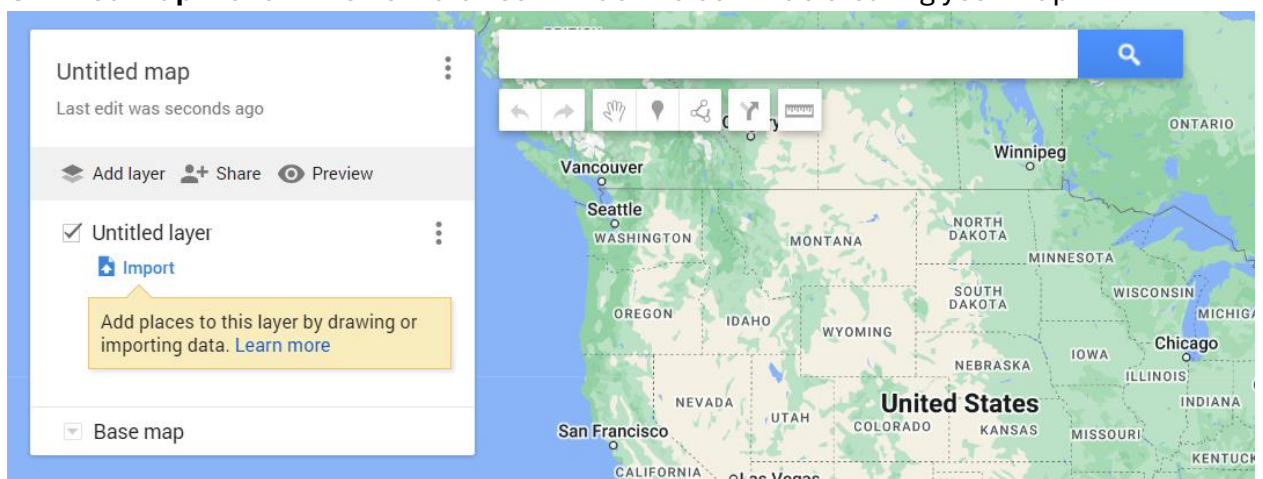
3. After selecting, a dropdown menu will appear. Find the **Maps** option and select.
4. Now, in the upper left-hand corner of the page, find the **Saved** option and select.



5. Once opened, options at the top of the opened saved list will be shown as **Lists**, **Labeled**, **Visited**, and **Maps**. Select **Maps**.



6. Once Maps has been selected, navigate to the bottom and select **Create Map**.
7. Once Create Map has been selected, a new tab will open in your browser titled **Untitled Map**. Follow this new browser window to continue creating your map.



8. Next you will find and name your site on the map.

- Use the search bar to locate your site. Type in the address or the name of the town your site is located in. Use local landmarks to help navigate the map to your census route site.
- Zoom in or out and reposition the map to fit your census route into the frame of your browser window. Use +/- button or scroll with your mouse wheel.
- Double click on the **Untitled Map** text and rename your map to reflect the title of your site and census route. i.e. North Point Park, Main Route.
- In the box below the name, give your map a description. i.e. Butterfly monitoring census route for the Colorado Butterfly Monitoring Network (CBMN) established by (your name).

✕

Edit map title and description

Map title

Description

This is an example CBMN route at site ABCDE.
 Established 2024 by John Doe.

Save
Cancel

- Select **Save** when finished.
- Double click on the Untitled Layer and title it the name of the route. i.e. Main Route

Example CBMN Route ⋮

This is an example CBMN route at site ABCDE.
Established 2024 by John Doe.

Last edit was seconds ago 🌐

📄 Add layer
👤+ Share
👁️ Preview

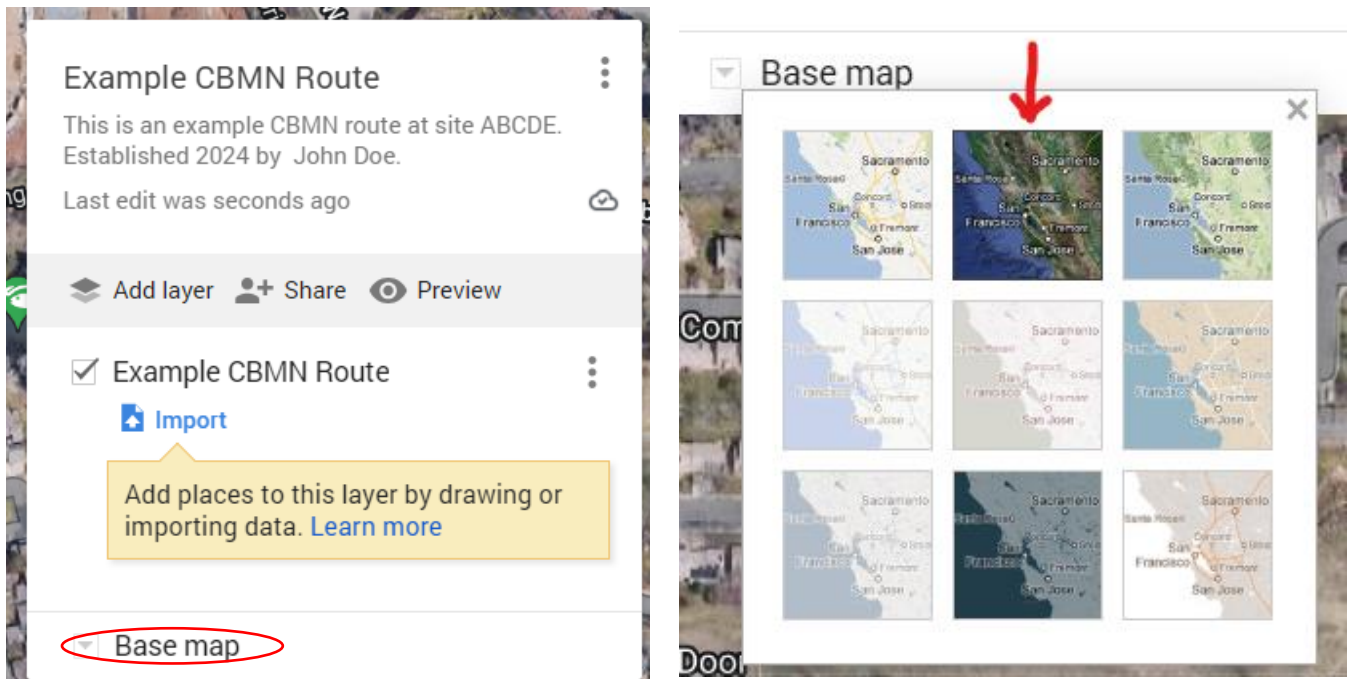
Untitled layer ⋮

📄 Import

Add places to this layer by drawing or importing data. [Learn more](#)

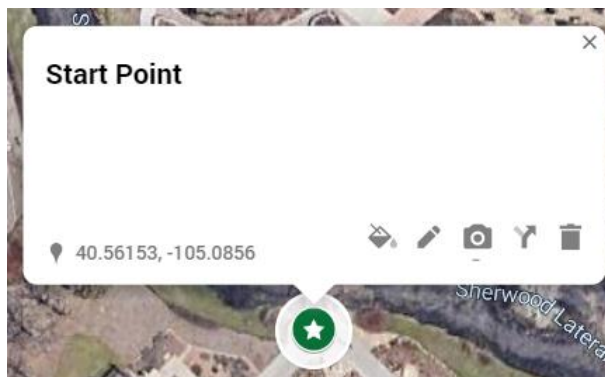
- Select **Save** when finished.

- h. Next, navigate to the small, upside-down triangle icon (▼) next to the **Base Map** text and select. A small selection of map views will appear- select the satellite view.

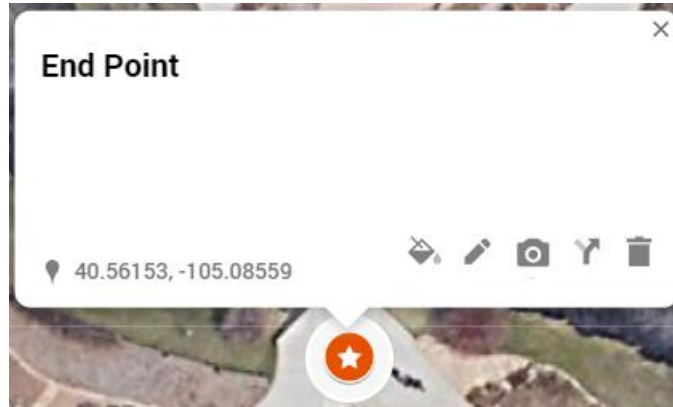


Now you are ready to begin mapping your census route.

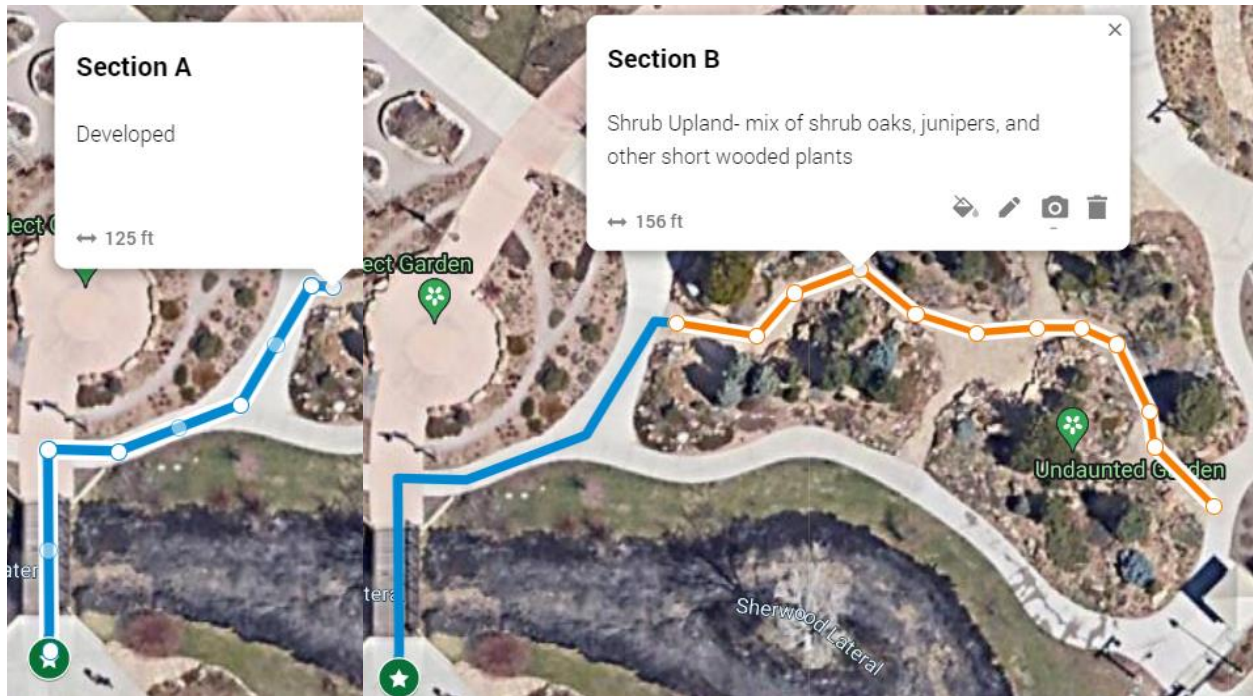
9. Create the **Start** and **End Points** of your route.
- Under the search bar, there are multiple icons. Select the icon that looks like an upside-down tear drop (▼). This is a **Marker**, which you will use to create points on the map.
 - Select the Marker button, and then select the point on the map where your route begins. Name this marker **Start Point** and select **Save**. You will see the **Paint** icon (🎨) appear at the bottom of the marker bubble; click on this. A menu will appear, which will give you the option to change the style and color of the marker. Change the **Start Point** marker to a green star (★).



- c. Repeat this process for the **End Point** marker of your census route. Name it **End Point** and select **Save** when finished. Make the End Point marker a red star (★).

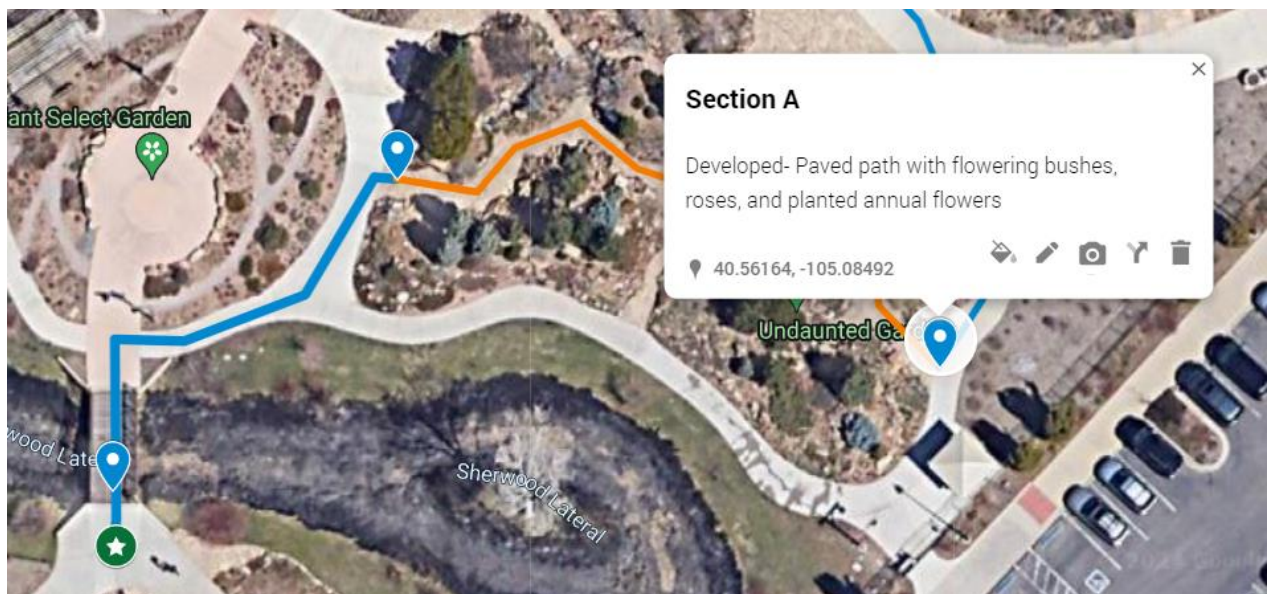


- 10.** Create lines to show the path of each section of the route.
- Under the search bar, there is an option to **Draw Line** (📍). Select this icon to create a line by tracing along the path from start of each route section to the end of each route section.
 - Select the **Draw Line** icon (📍).
 - Click on the Start Point of the first section to begin creating the path line.
 - Continue clicking along the path. Each time you click on the path, a dot will appear, and a line will connect each sequential dot.
 - When you reach the end of the route section, click on the last dot of the line to close this line.
 - Create a new **Line** for the path of each section until you reach the end of your route.
- 11.** Label each **Line** according to which section it is in.
- i.e. Section A Path or Section B Path, etc.
- 12.** Change the color of the **Line** in each section by selecting the paint icon (🎨).
- i.e. Section A Path is blue and Section B path is orange, etc. You can also edit the width of the **Line** in this menu to make the Line more visible and distinguishable.



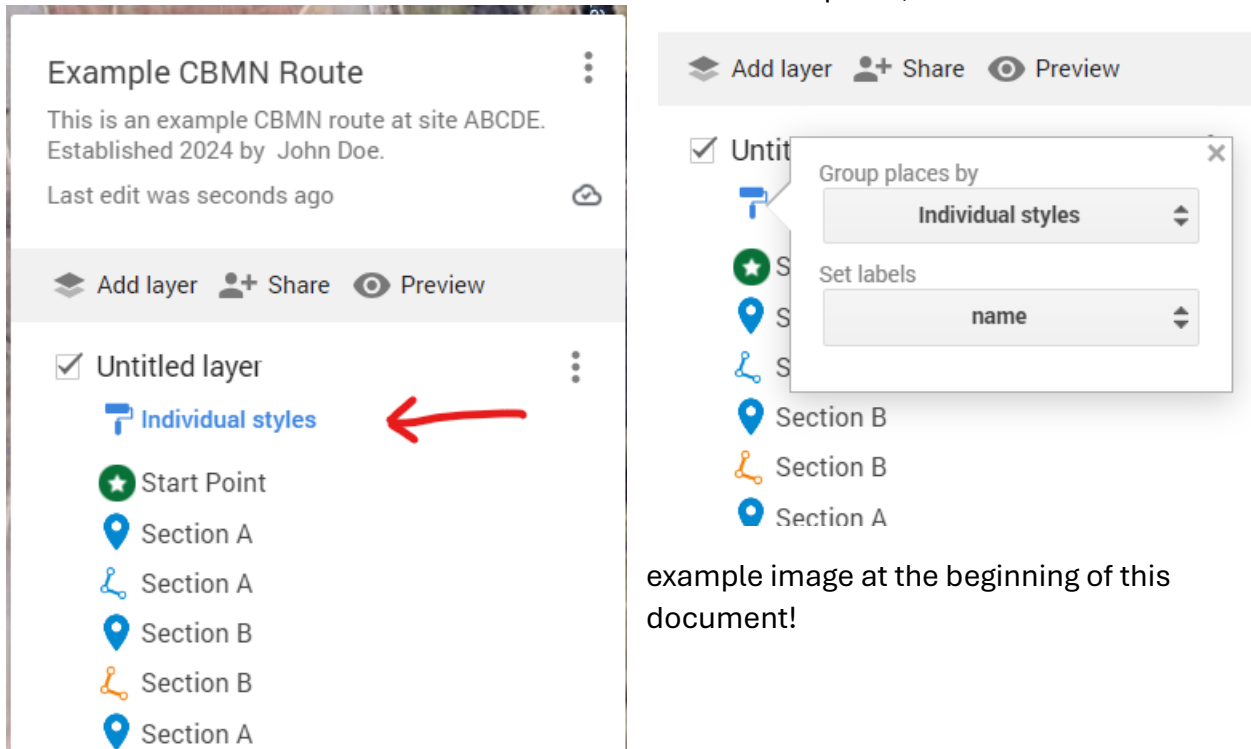
13. Create the Markers for each section of your route.

- Locate the Start point of each section (point where Section A begins, Section B begins, etc.)
- Place Markers at the beginning of each section and label them Section A, B, C, D, E, etc., respectively.
- Describe each section by identifying the habitat. Be as specific as you possibly can. Use the **Habitat Classes Guide** to help classify each section. Do this for all sections. Repeat this process of naming, labeling, describing with the route's start point markers. The markers for each section should be separated now by color and by icons resembling upside-down teardrops.



*A reminder that if your route has multiple sections of the same habitat type, treat them all as the same section. Meaning, if your route starts as Herbaceous Upland (Section A), transitions into Forested Upland (Section B), but then transitions back into Herbaceous Upland, your map should reflect this by showing Section A, then Section B, and then back to Section A again. *

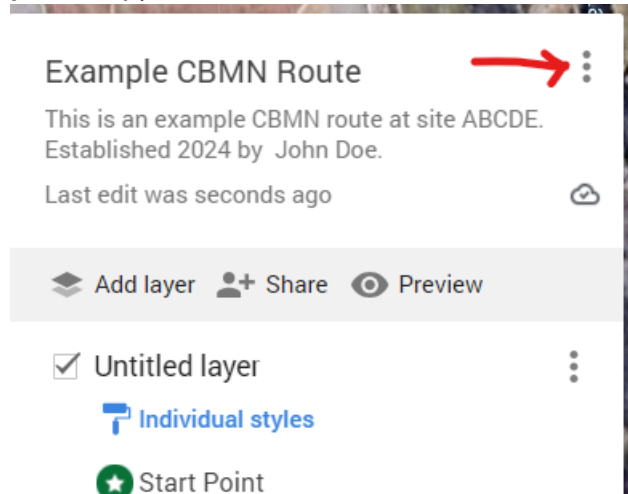
14. Underneath the title of your route, select **Individual Styles**. Under **Set Labels**, you may choose whether to display the name or description of your markers and path lines, or to leave them unlabeled. It is recommended to display the names of your markers and paths, as shown in the



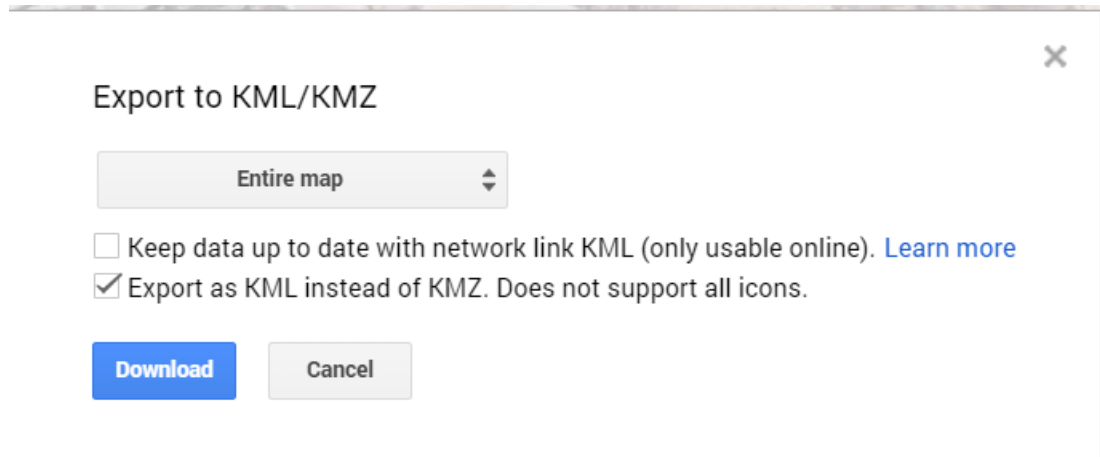
example image at the beginning of this document!

15. Once you have finished creating all markers and path lines of the route's sections, it is now time to create a **KML file**! This KML file is what will be used to create your census route in PollardBase.

- a. Select the icon that looks like three vertical dots (located to the right of the name of your map)



- b. Select **Export to KML/KMZ**
c. Make sure that the drop-down option indicates **Entire Map**
d. Select the option **Export as KML**, not KMZ.
e. Select **Download**. The KML file will be downloaded to your computer.



16. You did it! All that is left is to email your KML file along with your Site and Route Form to cbmn@butterflies.org.

Please reach out via email to cbmn@butterflies.org with any questions.