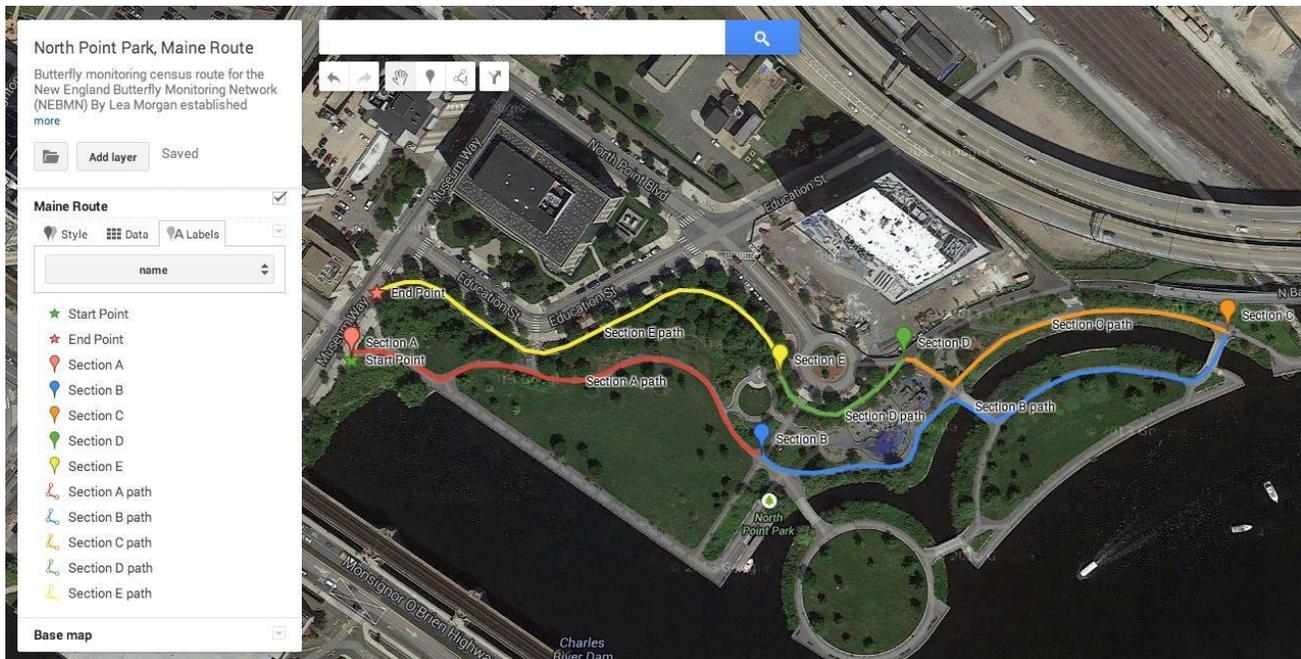


Creating a Map for Your Colorado Butterfly Monitoring Network Route



Google Map Instructions

Creating a Google Account

If you do not have a Google account please create one by using the following steps:

1. Navigate to www.google.com
2. Create a Google account by clicking on '**Sign In**' in the top right hand corner, then click on '**Create an Account**'
3. Create a **Username** and **password**; remember to record your username and password for future reference.
4. Now continue to follow the instructions below to create a Google map.

Creating A Google Map

1. Navigate to www.google.com and sign into your account.
2. Find the apps tab  (top right, near your name, looks like 9 squares in the shape of a square) and click on it.
3. In this dropdown menu, find the '**Maps**' tab and click on it.
4. In the upper **left** corner of the page, find the menu tab (looks like three horizontal lines) and click on it.
5. Click on '**My Maps**'. In some cases, a menu will be displayed in the center of the screen that says '**Welcome to My Maps.**' It will give you the option to create a new map, open an existing map, or take a tour. From here, click on '**Create a new map.**'
6. If you did not see the menu described in step 5, you should find the option to create a new map in the bottom left corner of the page after clicking on '**My Maps.**'
7. After opting to create a new map, a new tab will open in your browser titled '**Untitled map.**'

8. Finding and naming your site on the map:
 - A. Use the search bar to locate your site. Type in the address or the name of the town. Use local landmarks to help navigate the map to your census route site.
 - B. Zoom in or out and reposition the map to fit your census route into the frame of your window. Use the +/- button or scroll with your mouse wheel.
 - C. Double click on the '**Untitled Map**' text and rename your map to reflect the title of your site and census route. Ex: North Point Park, Main Route.
 - D. In the box below the name, give the map a description. For example: 'Butterfly Monitoring census route for the Colorado Butterfly Monitoring Network (CBMN) established by (your name).' Click '**Save**' when finished.
 - E. Double click on the 'Untitled Layer' and title it the name of the route. Ex: Main Route. Click '**Save**' when finished.
9. Go to the small upside down triangle () next to the 'Base Map' text and click on it. A small selection of map views will appear. Click on the satellite view.

Now you are going to start mapping out your census route.

10. Creating the Start Point and End Points of your route:
 - A. Just under the search bar there are a few icons. Find the one that looks like an upside down teardrop (). This is a 'Marker,' which you can use to make points on the map.
 - 1) Find the start point of your census route
 - 2) Click on the '**Marker**' button
 - 3) Click on the start point on the map. This will put a marker at the beginning of your route.
 - 4) A window will pop up giving you the ability to rename this marker to "Start Point" and to give a description of the start point in a text box below the title box. Be as descriptive as possible so that someone else would be to find your route.
 - 5) Click '**Save**' when finished. You can click on the start point marker and move it as needed.
 - 6) Click on  icon that looks like a diagonal pencil to edit the text. Always click '**Save**' after any changes are made.
 - B. Hover over the 'Start Point' text in the menu on the top left of your window. You will see the paint () icon appear below the text; click on it. A menu will appear, which will give you the opportunity to change the style and color of the marker. Make the 'Start Point' marker a green star ().
 - C. Repeat this process for the end point of your census route run. Name it 'End Point' and give it a detailed description. Click '**Save**' when finished. Make the "End Point" marker a red star ().
11. Creating the markers for each sections of your route:
 - A. Locate the start and end points of each section. Place markers at the beginning of each section and label them 'Section A, B, C, D, or E,' respectively. Describe each section by identifying the habitat. **Be as specific as possible.** Use the Habitat Classes guide provided to help classify each section. Do this for all sections.

Repeat the process for naming and labeling each section's start point as with the route's start and end point markers. The markers for each new section should look like upside down teardrops.

****Remember that if your route has multiple sections of the same habitat type, treat them all as the same section. For example, if your route starts as **herbaceous upland**, transitions into **forested upland**, but then goes back into **herbaceous upland**, your map should reflect this by showing **Section A**, then **Section B**, and then **Section A** again.****

B. Each section should be labeled with the following color guide

- Section A - RED 
- Section B - BLUE 
- Section C - ORANGE 
- Section D - GREEN 
- Section E - YELLOW 

12. Creating lines to show the path of each section of the route:

- A. To the right of the marker icon there is an option to '**Draw a line**' (); click on this to create a line mimicking the path through all section from start each section to end of each section.
 - 1) Click on the 'line' icon
 - 2) Click on the start point of the first section to begin creating the path.
 - 3) Continue clicking along the path. Each time you click the path, a dot will appear and a line will connect each dot. Place dots along the path to help form the line of the path.
 - 4) When you reach the end of the section, click on the last dot of the line to close this line.
 - 5) Create a new 'line' for the path of each section until you reach the end of your route.
- B. Label each line according to which section it is in.
Ex: Section A Path or Section B Path... so on.
- C. Change the color of the line in each section to match the marker color of that section. You do this the same way you changed the color of the markers. Ex: Section A Path is Red and Section B Path is Blue... so on. You can also edit the width of the line in this menu to make it more visible and distinguishable from other lines.

13. Underneath the title of your route, click on '**Individual styles.**' Under '**Set labels,**' you may choose whether to display the name or description of your markers and paths, or to leave them unlabeled. We recommend displaying the names of your markers and paths, as shown in the example image at the beginning of this document.

14. Creating a KML file:

- A. Once finished creating all markers and lines of the sections and paths it is now time to create a KML file that will be used to create your census route in PollardBase.
 - a. Click on the icon that looks like three vertical dots (located to the right of the name of your map)
 - b. Select '**Export to KML**'
 - c. Click on 'Entire Map' and then choose the '**Main Route**' or the name of the route you have just created.
 - d. Click on '**Download.**' The KML file will be downloaded to your computer.
15. Finally, email the KML file to the point of contact for your monitoring program.