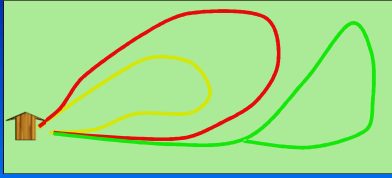


## Editing Data

From Tracks to Trails



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## Downloading Tracks

Using MN DNRGarmin

- DNRGarmin.exe provides an easy way of getting data from your Garmin GPS unit to ArcGIS.
- Can download waypoints or tracks.
- Can convert these to ArcGIS shape files.
- Can calculate distances as tracks are converted to shapefiles.

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## Garmin's Tracks

- Each time you turn your GPS unit on or off (or turn automatic tracking on or off), a new segment of a track is created.
- In DNRGarmin, the `new_seg` variable is set to true for the first point of the new track.
- From within DNRGarmin, you can change the value of `new_seg` to *false* to combine tracks or to *true* to separate them.

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## Saving Tracks

From DNRGarmin

- Once your table of GPS data is in DNRGarmin and edited as you wish, you can save it as a shapefile
  - Point, line, or polygon
  - Projected or unprojected. The former defaults to the UTM zone you first choose when running the program.

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## Loading tracks into ArcGIS

- Choose *add data* to add the shape file to your map, as usual.
- At first, all the tracks will be displayed in one color and line type.
- Open the editor toolbar and edit the shapefile:
  - Pull up the attribute table
  - Add a column for trail name
  - Give each trail a unique name
  - Symbolize based on these unique values.

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## Beautifying the trail

- Make sure your trail overlies a corresponding map or aerial photo.
- Open the editor toolbar.
  - Double-click on one of the trails.
  - The vertices will become green squares.
  - Move or add vertices as needed to make the trail follow the desired path.

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## Next Class

- Bring your GPS unit with a track stored in it.
- We will hook up two cables to the laptops and transfer your data.
- We will practice making this data into a trail map.
- On the test, I will meet with each of you individually in my office with a GPS unit I've used to lay down a track.

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## Today's Class

- Continue with Chapter 16.

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