Lesson 2.3: Creating a Systematic Soil Sampling Grid

Data Source: *dataset2.zip*

Part 1: Creating systematic grids

1. Open **ArcGIS Pro** with only *Field20_Boundary.shp* visible (unselect previously used group layers)
3. Search **Create Fishnet** in the search bar at the top of the screen.
4. In **Create Fishnet** dialog window, set each parameter as follows.

   Output Feature Class: *Sampling_Grid_1ha*

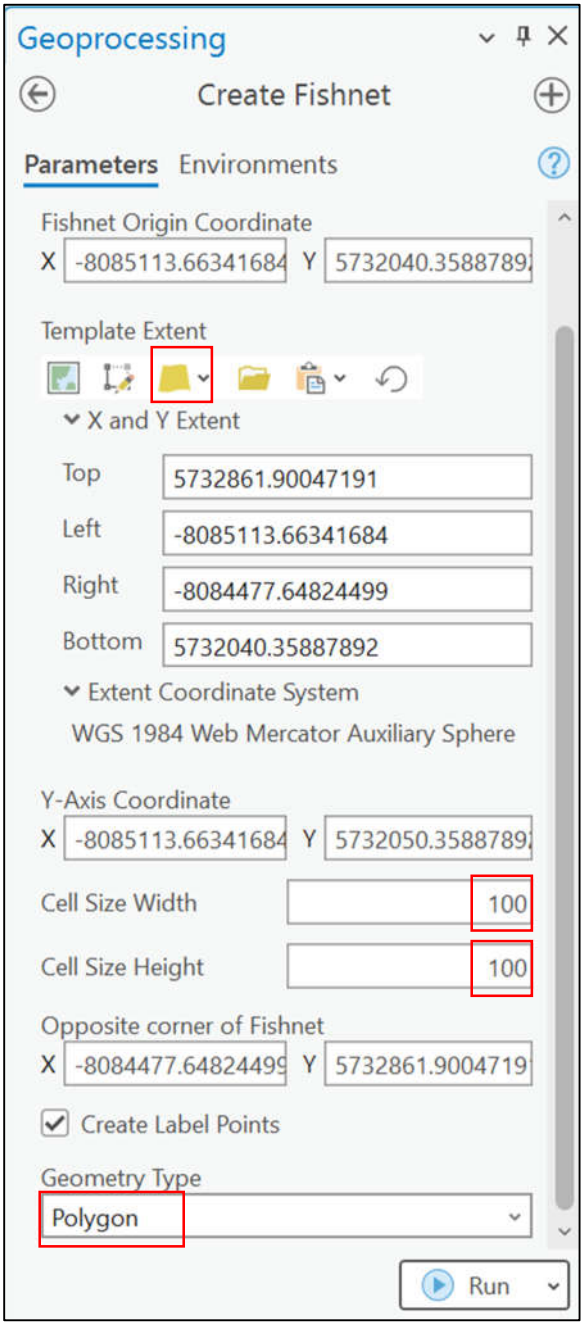
   Template Extent: *Field20_Boundary*

   Cell Size: *100*

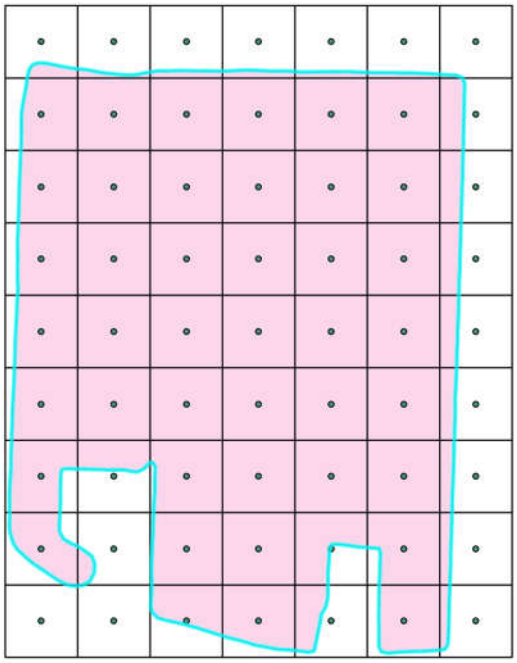
   Cell Width: *100*

   Geometry Type: *Polygon*

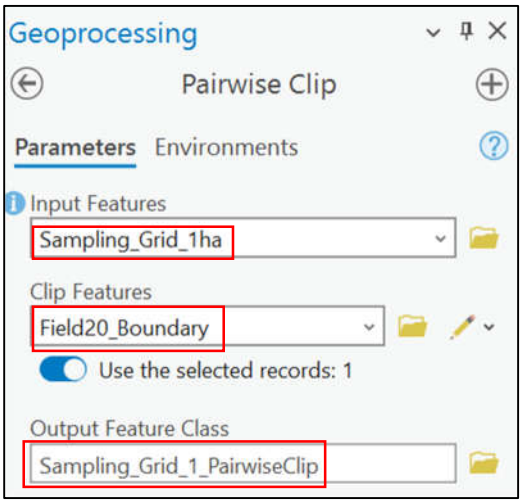
   Hit **Run**.

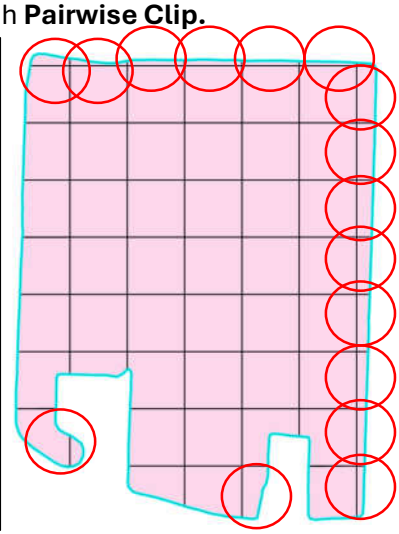


5. Right click on the symbology box under the new sampling grid layer and change the color to be clear with black lines. This will allow you to see the field underneath the layer.

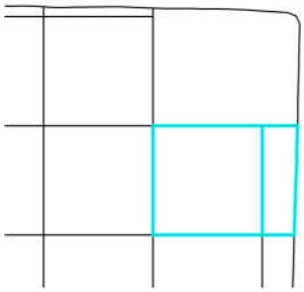


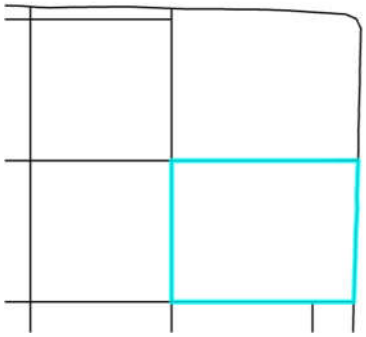
6. Clip the layer to Field20_boundary. Search **Pairwise Clip.**

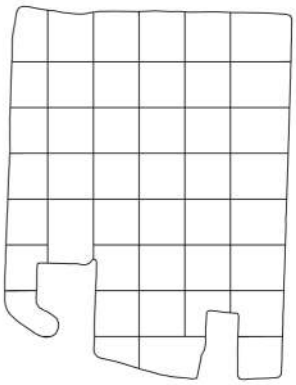




7. Remove the previously unclipped grid (SamplingGrid_1ha) from Contents and only keep the new clipped grid. Some grids that are not full squares and they should be manually merged to the adjacent grids (the circled ones need to be merged).
8. Choose **Select** under **Map** (make the *Field20_Boundary* invisible) then click and drag to select multiple squares (the whole square and the one you are merging into it).
9. Search **Merge Features** in the search bar.
10. Hit **Merge**, in the bottom right corner.
11. Repeat this for all the squares that have been circled. (If you have a two-part feature you will have to **Explode** it first)







Part 2: Creating centroids of polygon features

1. Clear all selections.
2. Search **Features to Point** in the search bar.
3. Select the input and output shown and hit **Run**. Save your project.