**Gapveg polygons & the imagery provided in ArcGIS:**

Our gapveg class outlines polygons that define different areas of local flora based on what has been reported to grow and thrive there. We can see the coloration changes along the different grasslands and more woody areas as well. The imagery helps paint the picture of where certain flora grow, and our polygons label/classify it.

**NDVI raster:**

Our new raster layer really highlights the areas most suitable to our needs. With the darkest areas falling right into the polygons that correspond to our ideal territories, this new layer is incredibly helpful with identification. For example, our southernmost grassland area has values between 0.15 and 0.23, which tells us that this area has low photosynthetic activity.

**Classification Methods:**

The Natural Breaks (Jenks) classification is the method that I chose for this project. After comparing the three, it is the one that is the easiest to understand visually, with quantile being acceptable as a backup, and equal interval being completely unreadable. Each of these methods corresponds to the various polygons of gapveg, with reds being higher in photosynthetic activity, and yellows indicating the opposite.

**Suitability Matrix:  
 Predator Density Rank**

|  |  |  |  |
| --- | --- | --- | --- |
| **Veg Rank** | **1** | **2** | **3** |
| **1** | **1** | **2** | **3** |
| **2** | **2** | **3** | **4** |
| **3** | **3** | **4** | **5** |

**Majority vs. Suitability:**

The relationship between these two feature classes is that they are nearly identical. They are both used to identify suitable areas within the given allotments for our rabbit. The difference is that the majority one is being used to highlight which land allotments are the best choice for our situation. The Zonal Statistics tool did a good job of identifying the most suitable allotments, but it fails to consider that some allotments have large areas of suitable land as well.