Exercise 3: Create a species list with Phenology Tool

The phenology tool is a simple way of getting species lists and timing for anywhere in the continental US.

1. Open Phenology Tool (<https://avianknowledge.net/index.php/phenology-tool/>)
   1. Go to Avian Knowledge Network home page (avianknowledge.net)
   2. Click on the line graph icon or title **USE TOOLS TO EXPLORE AKN DATA** about half way down the page.
   3. Scroll down the page to the list of tools, and find the link for **Phenology Tool**
2. Let’s start by getting oriented to the Phenology Tool:
   1. To **zoom in / out**, click on the Plus/Minus icons in the upper right corner. **Double click** the mouse to zoom, as well.
   2. To **pan**, click-hold the mouse and drag.
   3. To change the **underlying base map**, click on either the Topo or Satellite options in the upper right corner.
   4. **Geographic Area** - you can type in an address or place name, hit Enter, and the map will zoom to that location.
   5. **Select Area** - this lets you enter a region on the map (draw a polygon), ending that polygon entry by double clicking to close or clicking again on the first point. As soon as the area is defined, the Create Graph button becomes available
   6. **Select Species** - by default all species found in the area will be returned, and this allows you to limit the species returned. Type in species names or AOU/IBP bird codes and select the species you want. Click the garbage can icon to the right of the species to remove them from this list.
   7. **Create Graph** - when you click on this button, the tool queries the underlying model and returns a list of species with modeled abundance across the year.
      1. Click the **PDF** button in the purple header to save the result as a PDF file, with map.
      2. Click the **Show Effort** toggle to turn effort visualization in the Graph on or off.
   8. **About your species report** - click on this link above the tool to get complete information about how the underlying model was created.
3. You need to get a species list for your installation. Zoom into your location, and find out what the tool provides for species and seasonal availability for your area.
   1. The data underlying this tool is modeled to a 10km Military Grid Reference System (MGRS) grid. Zoom out to a broader area and rerun the search for a larger area around your installation. How spatially sensitive is the model?
   2. Go to eBird Bar Chart tool (<https://ebird.org/GuideMe?cmd=changeLocation>) and create a similar output for your area. How similar or different are these tools?