Exercise 4: Create a species list with Rapid Avian Information Locator (RAIL) Tool

Purpose: The purpose of this exercise is to familiarize you with the RAIL analysis tool. The RAIL tool is available without an AKN account. This is a good starting point for finding species information, including PIF population estimates, conservation status, and phenology for any location in the continental U.S. While not intended to provide final data for reports, it can help you find some general information about the species in a particular area and their conservation status.

About the Tool: The species lists you get in the tool are based on an analysis of data from the AKN at sharing level 2-5 along with other datasets, such as BBS and eBird. It is important to understand that the data presented here is modeled on a 10-km grid, so the species list won't necessarily be exactly tied to the geographic boundary you have drawn—it may include more species than you would expect, or it may exclude species you know are there because they were not abundant in the datasets used for the analysis. Also note that all subspecies are grouped at the species level in this tool.

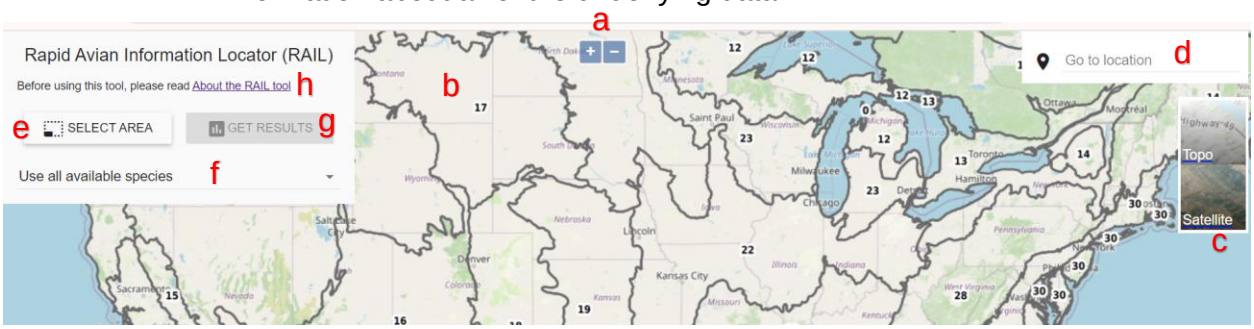
Goal: Be comfortable navigating the RAIL tool to find information about species on your installation, and understand the limitations of the tool.

Steps:

1. Navigate to the **Rapid Avian Information Locator (RAIL)** tool. (You can find a link to the RAIL tool on the DoD AKN Portal (dodakn.org) under the "Manage Data" tab. Scroll down to the heading "Make Decisions" and click on the RAIL tool.)
2. Let's start by getting oriented to navigating the map and selecting in the RAIL Tool
    a. To **zoom in / out**, click on the Plus/Minus icons at the top of the screen. You can also **Double click** the mouse to zoom in and **Shift-Double click** to zoom out.
    b. To **pan**, click-hold the mouse and drag.
    c. To change the **underlying base map**, click on either the Topo or Satellite options in the upper right corner.
    d. **Go to location** – on the top right hand side of the window, you can type in an address or place name, hit Enter, and the map will zoom to that location.
    e. **Select Area** - this lets you draw a polygon on the map, ending that polygon entry by double clicking to close or by clicking again on the first point. As soon as the area is defined, the Get Results button becomes available.
    f. **Use all available species** – this lets you select specific species to query. The default is all available species, but you can type species names or codes into this box to query for a list of specific species.

g. **Get Results** – this will load the RAIL report on species you chose found in the area you drew. Click on **FILTER RESULTS** button at the top of the report to filter species by a variety of characteristics. Click on the expand button at the right side of any row to get full description about this species, including PIF population estimates, physical characteristics, habitat, biology, conservation status, picture, distribution map, and AKN phenology graph.

h. **About the RAIL tool –** click on this link above the tool to get complete information about all of the underlying data.



3. You need to get a species list for your installation because you are doing a NEPA assessment for a project. Zoom into your location, and find out what species are found and what information the tool provides to help you in your NEPA analysis. What data can you find on DoD Mission Sensitive Species (see below)?
4. The data underlying the RAIL tool species selection is modeled to a 10-km 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?
5. Extra credit: 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 the resulting species lists between these two tools?

DoD Mission Sensitive Species list

Northern Bobwhite
Greater Sage-Grouse
Mountain Plover
Greater Prairie-Chicken
Burrowing Owl
Least Tern (Atlantic Coast Pop)
Cerulean Warbler
Golden-winged Warbler
Pinyon Jay
Southeastern American Kestrel
Henslow's Sparrow
Rusty Blackbird
Bendire's Thrasher
Tricolored Blackbird
Bachman's Sparrow