Exercise 1: Create Sampling Units

Purpose: The purpose of this exercise is to learn how to create a sampling unit hierarchy within your AKN Project to support a point count survey. The AKN Project you'll use for this exercise will be DOD_DEMO. All sampling units in the AKN, including Point Count transects, are nested within Study Areas. We have already created Study Areas within DOD_DEMO based on each service branch. In this exercise, you will 1) create a point count transect within your service branch Study Area and then 2) create points in your point count transect.

Thinking Ahead: When you create sampling units for your bird surveys, they will all be in the AKN Project we create for your installation. Your Study Area doesn't have to be a specific geography, in fact it can be based on your survey type (e.g., you can nest all your multi-species point count transects under one Study Area, and all your Burrowing Owl surveys under a different Study Area).

Point count points are always nested within point count transects, but you should only group points together within the same transect if they are part of the same survey (i.e., they are grouped geographically and always surveyed together on the same day).

In this exercise, we use generic, non-geographic names that are unique (sampling unit names must be unique within an AKN project). As you work through this, think about how your study locations could be named based on geographic features (e.g., a transect named Webster Lake, with numbered points underneath such as Webster_01, Webster_02, etc.).

Glossary:

Project – The fundamental unit of organization for observation data within the AKN. Projects contain information about how (Protocols), who (Researchers and Users), where (Sampling Units), when (Sampling Events), and what (Sampling Event Observations) data are collected.

Sampling Unit – Field location where research or a survey is conducted, and samples (observations) are collected. Sampling units are arranged hierarchically within AKN Projects (e.g., point count points nested within a transect). Sampling Units contain a location name and geometry that describes where it sits on the earth. All point, polygon and other geographic data are described in WGS-84 Latitude-Longitude (EPSG:4326) geographical coordinate system.
>   *Some types of Sampling Units:*
>   **Study Area** – Study areas are the highest organizational level in the sampling unit hierarchy and are often used to help organize your data for analysis or management. Some projects simply create a single study area the entire project, while others use them to categorize different survey types, or different monitoring programs. There must be at least one study area in every project.

Point Count Transect – Transects are collections of points that get analyzed as statistical replicates. All point count points in the AKN must be nested underneath point count transects, even if there is only one point per transect.

Point Count Point – Points are the unique location with coordinates where your sampling takes place.

<u>Goal:</u> Create a new point count transect with one point under your service branch's Study Area

STEP 1: BEFORE YOU BEGIN, decide how you will name you point count transect and point using the instructions below:

1. Select a Study Area using the service branch most applicable to you. These already exist in the project DOD_Demo. This will be the study area under which you will nest the point count transect you are about to create.

Circle your Area:

AIR FORCE   ARMY   MARINES   GUARD   NAVY   OTHER

2. Create a point count transect name. This is usually 3-5 letters or numbers. For example, you can use your initials plus TR for transect (e.g., DSMTR) (remember, it has to be unique in the system!). You can also create a transect name based on a location at your installation.
Point Count Transect Name _____

3. Create a point name for the point that will be nested under your transect. You might typically name your points with numbers (1,2,3, etc.) but because they have to be uniquely named, you should name your point using your transect name PLUS a number (e.g., DSM_1). We will be adding more points to your transects in a later exercise, so make sure to give it a number!
Point Count Point Name _____

STEP 2: Create your Sampling Units in the project DOD_Demo
In order to enter Point Count data, you must create a Point Count Transect under a Study Area, with one or more Point Count Points underneath the Transect.

1. Navigate to the Project Leader Application. Go to the DoD AKN Portal (dodakn.org). Click on the "Manage Data Now" button on the home screen. Scroll down to the heading "Get Data In" and click on the Project Leader Application (https://data.pointblue.org/science/projectleaders/). Log in if needed.
2. Under "Sampling Units" Click on **Create and Manage.**
3. Select the project **DOD_DEMO** and click enter.
4. On the left side, you'll see a list of service branches. Click to highlight **your branch**. This is the Study Area you will nest your new transect under.

Create a Point Count Transect:

5. Once your service branch is highlighted yellow, click on the "**online form**" button under "**Add sampling units** …" on the right side.

6. For **Type of sampling units**, check **Point Count Transect** and click the orange "**enter**" button at the top of the section.

7. Fill in the information about your Transect
   a. Create a name for this sampling unit: enter the **Point Count Transect Name** you entered at the top of the page.
   b. Give this sampling unit a short name: enter the **Point Count Transect Name** again. (In this case, we are using the same name for both fields. You can have a more descriptive version for the name if you like. The short name is limited to 12 characters. The combination of the short and long name must be unique within the entire *project* – not just within the study area)
   c. Description: add a few words to describe your transect
   d. Skip the other fields for now, and click the orange **save** button at the bottom of the screen**.**

8. You should see your new Point Count Transect on the left.

Create a Point Count Point under your new Point Count Transect:

9. **Click to highlight the transect you just entered.** We will now follow the same steps to add a point nested underneath the transect you just created.

10. Again, once highlighted yellow, click on the "**online form**" button under "**Add sampling units** …" on the right side.

11. Type of sampling units, check **Point Count Point** (the only option) and click the orange "**enter**" button.

12. Fill in the information about your Point
   a. Create a name for this sampling unit: enter the **Point Count Point Name** you entered at the top of the page, adding more descriptive text if you want.
   b. Give this sampling unit a short name: use the **Point Count Point Name** again.
   c. Geometry: (near the bottom) click on the **Point** button.
      i. A new window will open that lets you add the location of your point. Zoom / pan to some location.
      ii. Click on the map to add a point and click the **keep it** button. This will save the Lat/Long coordinate information to the point you just created.
   d. Skip the other fields for now and click **Save.**

13. You should now see your Point listed under your Transect, which is under your Study Area (your service branch).