



# Exercise 1: Create Sampling Units

**Purpose:** The purpose of this exercise is to learn how to create a sampling unit hierarchy for a point count survey within your AKN Project. 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.**

## Key Terms and Definitions:

**Project** – The fundamental unit of organization 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). All sampling units are defined by a “name” and a “short name” that together must represent a unique set of characters within a Project. 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 AKN Projects simply create a single Study Area, while others use them to categorize different survey types, or different monitoring programs. There must be at least one Study Area in every AKN 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.



**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 Study Area:**

**AIR FORCE    ARMY    MARINES    GUARD    NAVY    OTHER**

2. Create a **point count transect** name. This is usually 3-5 letters or numbers. For this example, you can use your initials (e.g., ABC), or a location name at your installation, but remember it must be unique within the DOD\_DEMO project. For example, you can use your initials (e.g., ABC) (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., ABC\_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 and log in if needed. (You can find a link to the Project Leader application under “Manage Data” tab on the DoD AKN Portal (dodakn.org).
2. Under “Sampling Units” Click on **Create and Manage**.
3. Select the project **DOD\_DEMO** and click enter.



- 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 and Manage Sampling Units

**DOD\_DEMO - DoD Demonstration Project** [open new project](#)

Click on the Sampling Unit or Project you want to select (it will highlight yellow). Open any part of the tree to get to more detail. Hover on a tree node and the tooltip will tell you what type of feature it is.

☆ DOD\_DEMO - DoD Demonstration Project

- └ Air Force (AIRFORCE)
- └ Army (ARMY)
- └ CAMASNR (CAMASNR)
- └ Field Exercise (FIELD)
- └ Marine Corps (MARINES)
- └ **National Guard (GUARD)**
- └ Navy (NAVY)
- └ Other Service Branches (OTHER)

**Add Sampling Units under the highlighted feature with:**

[online form](#)   [GPS-U file](#)   [Waypoint Plus file](#)  
[KML file](#)   [SHP file](#)

**Update Sampling Unit geometry under the highlighted feature using:**

[GPS-U file](#)   [Waypoint Plus file](#)   [KML file](#)  
[SHP file](#)

**Manage the highlighted feature:**

[edit](#)   [move in hierarchy](#)   [delete](#)

### STEP 3: Create a Point Count Transect:

- Once your service branch is highlighted yellow, click on the **“online form”** button under **“Add sampling units ...”** on the right side.
- For **Type of sampling units**, check **Point Count Transect** and click the orange **“enter”** button.
- Fill in the information about your Transect
  - Create a name for this sampling unit: enter the **Point Count Transect Name** you wrote down in STEP 1 above.
  - 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. Remember, the combination of the short and long name must be unique within DOD\_DEMO (the AKN Project) – not just within the Study Area)
  - Skip the other fields for now, and click the orange **save** button at the bottom of the screen.

### Add a New Sampling Unit

\*Select your project **DOD\_DEMO - DoD Demonstration Project**  
 As part of **National Guard(GUARD)**

**Add One**

\*Type(s) of sampling unit **Point Count Transect (None)**

\*Create a name for this sampling unit

\*Give this sampling unit a short name

Description

URL with Information

Landowner Category **X - not specified or mixed**

Is location discoverable?  yes  
 no

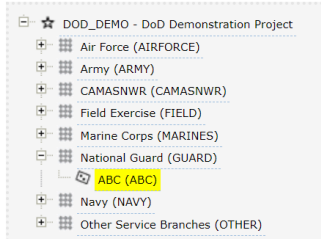
Is location active for new observations?  yes  
 no

[save](#)  
[cancel](#)

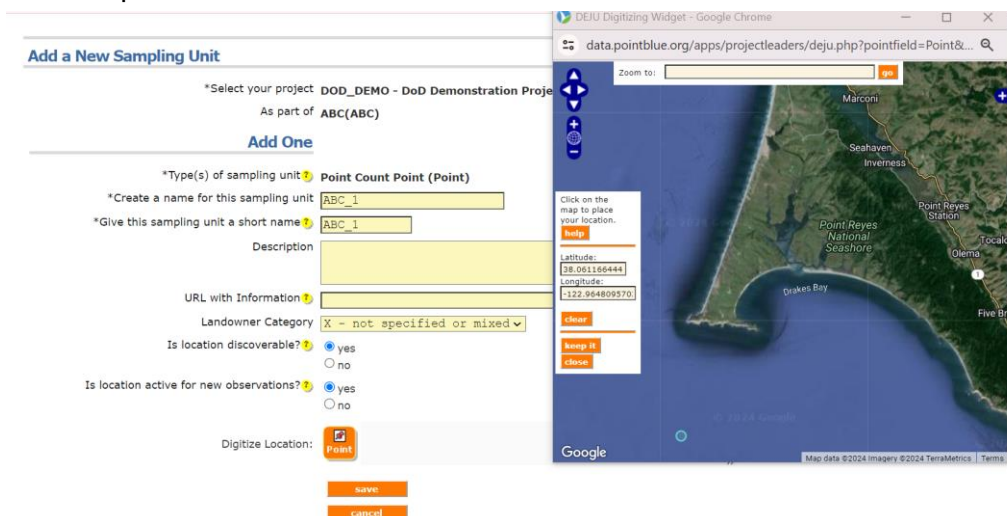


### STEP 4: Create a Point Count Point under your new Point Count Transect:

You should see your new Point Count Transect in the tree view on the left. **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.

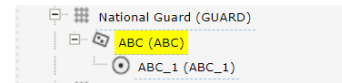


8. Again, once your transect is highlighted yellow, click on the **“online form”** button under **“Add sampling units ...”** on the right side.
9. Check **Point Count Point** as the sampling unit type (the only option) and click the orange **“enter”** button.
10. Fill in the information about your Point
  - a. Create a name for this sampling unit: enter the **Point Count Point Name** you wrote down in STEP 1 on the first page of this exercise, 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) next to “Digitize Location” 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**.





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



**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).