



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 or organization. **In this exercise, you will 1) create a Point Count Transect within your service branch or organization Study Area and then 2) create a point on 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, monitoring programs, or geographically distinct areas. 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: Locate your Study Area within the DOD_DEMO project.

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** on the DoW AKN Portal (<https://dodakn.org>) under the “Manage Data” tab and log in if needed.
2. Under “Sampling Units” Click on **Create and Manage**.
3. Locate the **DOD_DEMO** project in the white box on the left and **select the blue arrow** next to the project name to expand the sampling unit hierarchy within this project.
4. You will see a list of service branches or organizations. Click **the branch or organization most applicable to you** to select it. This is the Study Area you will nest your new transect under.

Sampling Unit Manager

This tool allows you to add new and edit existing sampling units. All projects that you have access to, including any in your program, will be available for selection.

Project

Select a project or sampling unit within which you would like to add or edit a sampling unit.

Filter

All available projects and programs

- ▼ ○ ★ DOD_DEMO - DoD Demonstration Project
- ■ Air Force (AIRFORCE)
- ■ Army (ARMY)
- ▶ ○ ■ CAMASNWR (CAMASNWR)
- ■ Field Exercise (FIELD)

Create Manage

Viewing DOD_DEMO > AIRFORCE

Type: Study Area
Name: Air Force
Short name: AIRFORCE
Geometry: None
[+ Show additional details](#)

STEP 2: Create a Point Count Transect.

1. Once your service branch or organization is selected, click on “**Create**” on the right side of the page and then click “**Online form**”.
2. For **Type of sampling units**, select **Point Count Transect**.
3. Fill in the information about your Transect.
 - a. “*Create a name for this sampling unit*”: Come up with a **Point Count Transect Name**. For this example, you can use your initials (e.g., ABC), or a location name at your installation.
 - Thinking Ahead: The combination of the Name and Short Name for a sampling unit must be unique within the AKN Project (in this case, DOD_DEMO), so avoid generic names such as “Transect 1”.



- b. **“Give this sampling unit a short name”**: If your transect name is 12 characters or less, enter the **Point Count Transect Name** again. If the name is too long, create an abbreviated name.
- It is recommended that you do not use spaces in the short name; remove any spaces from the short name or replace them with an underscore (“_”).
 - Thinking Ahead: The long and short name are not required to match, but it is often simplest to keep them the same when possible. Because the short name is limited to 12 characters, the long name can be used to provide more description when needed.
- c. Skip the other fields for now, and click the blue **Add Sampling Unit** button at the bottom right of the screen.

Project

Select a project or sampling unit within which you would like to add or edit a sampling unit.

Filter

All available projects and programs

▼ ○ ★ DOD_DEMO - DoD Demonstration Project

○ Air Force (AIRFORCE)

○ Army (ARMY)

▶ CAMASNWR (CAMASNWR)

○ Field Exercise (FIELD)

○ Marine Corps (MARINES)

○ National Guard (GUARD)

○ Navy (NAVY)

○ Other Service Branch (OTHER)

Some functionality has changed as of February 2026. See [details](#).

Create ▼ Manage ▼

Add Sampling Unit

Adding sampling unit to DOD_DEMO > AIRFORCE

Type of sampling unit*

○ Study Area

○ Point Count Transect

○ Area Search Plot

○ Shorebird Area

○ Fixed Radius Point Count Transect

○ Fixed Transect

○ Secretive Marshbird Transect

○ IWMM Management Unit

+ Show sampling unit types not supported in Biologists

Create a name for this sampling unit*

ABC

Give this sampling unit a short name*

ABC

Sampling Unit Short Name is how a sampling unit will be identified in tables, maps.

Add Sampling Unit

STEP 3: 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. We will now follow the same steps to add a point to your transect.

1. Click on the transect that you just created in the sampling unit hierarchy (white box on the left) to select it.



2. Select **Create** and **Online form** on the right side.
3. Select **Point Count Point** as the sampling unit type (the only option).
4. Fill in the information about your Point:
 - a. *“Create a name for this sampling unit”*: Come up with a **Point Count Point Name** for the first point that will be nested under your transect.
 - You may typically name survey points using only numbers (1,2,3, etc.), but because sampling unit names must be unique within a Project, you should name your point using your transect name plus a number (e.g. ABC_1).
 - We will be adding more points to your transect in a later exercise, so pick a number you can easily add on to.
 - b. *“Give this sampling unit a short name”*: Use the **Point Count Point Name** again.
 - c. Scroll down to “Digitize location” and click on the **Select Point** button.
 - ii. A new window will open that lets you add the location of your point. Zoom / pan to some location.
 - iii. Click on the map to add a point and click the **Save Area** button. This will save a Lat/Long coordinate to the point you just created.



Select Sampling Unit Area

Either click on the map or change "Zoom to" mode to "Coordinates", enter your coordinate pair and select "Zoom to Coordinates" to place your location.

Zoom to

Address Coordinates

Address

Zoom to Address

Clear Selection

POINT(-122.93066 42.658379)

Save Area

d. Skip the other fields for now and click **Add Sampling Unit**.

You should now see your point listed under your transect, which is under your Study Area (your service branch or organization). This is the end of Exercise 1.



Thinking Ahead: When you create sampling units for your bird surveys, they will all be in the AKN Project created for your installation or organization. Your **Study Area doesn't have to be a specific geography**, in fact it can be based on your survey type. For example, 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).

There are several options provided under the "Manage" tab for managing Sampling Units. If needed, **you can edit the names and locations of points or rearrange their position** within the sampling unit hierarchy using the options in this menu.