



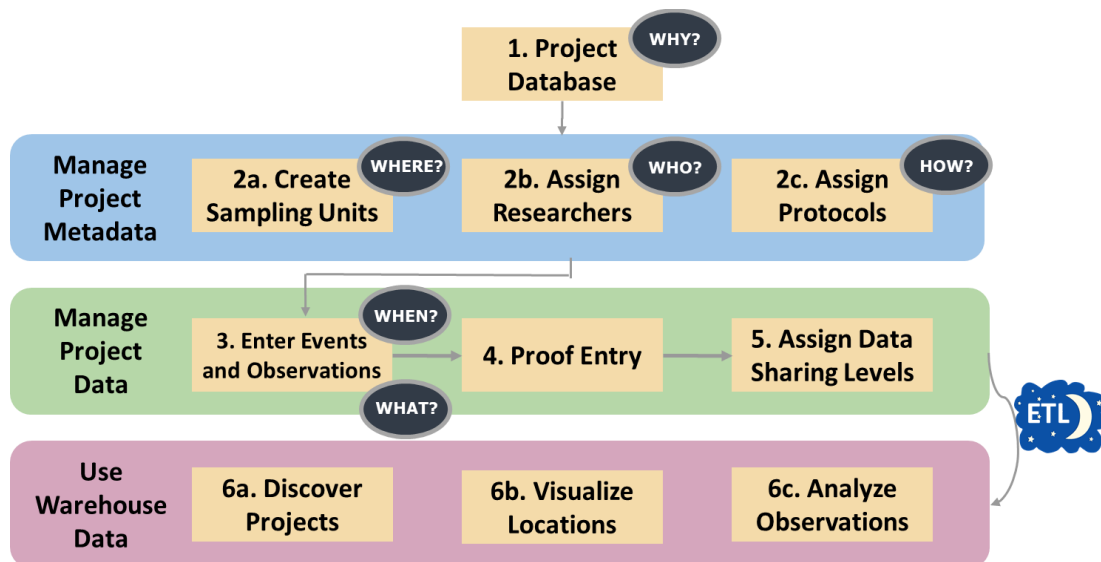
# AKN Glossary for DoD

**Users access levels** (Note: to obtain any level of user access in the AKN, you must first register for a user account. Please visit <https://www.dodakn.org/new-users/> to find your project name and create a new user account.

The AKN allows for multiple levels of access to enter, manage, and share data. AKN users are assigned a User Role associated with each AKN Project they have permission to access. Current User Roles include:

- **Biologist:** An AKN user assigned as a Biologist in an AKN Project can enter and proof data. Biologists can also review, edit, or correct previously entered data in any dataset housed within the AKN Project.
- **Project Leader:** In addition to all Biologist User Role capacities, AKN users assigned as a Project Leader in an AKN Project can assign Sampling Protocol Definitions to an AKN Project, manage the Sampling Units (areas, points, transects, etc), manage data, get full exports of the AKN Project data from the system, and manage the User Roles (Biologist or Project Leader) of other AKN users on the AKN Project. Project Leaders can also set the desired data sharing levels for data, which determines how the data will appear in the various tools in AKN.

## Data Management Terms:



**AKN Project:** Fundamental unit of organization for observation data within the AKN. Projects contain information about how (Sampling Protocols), who (Researchers and Users), where (Sampling Units), when (Sampling Events), and what (Sampling Event Observations) data are collected. For DoD, each installation has its own project.

**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.

**Researcher:** A person's name stored in the AKN assigned to a Project(s) by the respective Project Leader(s) and is identified with collecting observations. A Researcher does not have an AKN user account and therefore cannot enter or proof data, but an individual who is registered either as a Biologist or Project Leader can enter data on behalf of the Researcher under the researcher's name.

**Sampling Protocol:** Defines how the data were collected and how they are stored. This includes extended field names, domains, and any rules built into the data structure.

**Sampling Event:** Represents the survey itself with a unique combination of location, date and time, person/people, and the protocol employed.

**Sampling Observation:** Observations made at a sampling event; these observations will differ depending on the specific AKN protocol being used, but will contain some core fields such as species and count.

#### **Sampling Protocol Types:**

- **Area Search:** An observer records all the birds detected (often with other behavior characteristics) within a specific boundary in a recorded period of time. Area search protocols include start and end times, the species observed, and can also include a count, detection cues, or breeding behaviors. Area search protocols are flexible and can be adapted to a wide variety of surveys, and are often used to enter comprehensive species checklists. Unless specified, the protocol is assumed to be an exhaustive survey of all species.
- **Point Count:** An observer records all the birds detected (often including other behavior characteristics) from a series of known, fixed locations, surveying each location for a set period of time. Point count protocols include the duration of the survey, how the time is binned, and often include distance (binned or exact), detection cues, or breeding behavior. Unless specified, the protocol is assumed to be an exhaustive survey of all species and that each animal is counted once.
- **Linear Transect:** An observer moves along a path recording all the birds detected (often with other behavior characteristics) along the way in a recorded period of time. Linear Transects are done either on foot or in a vehicle (airplane, boat, etc). Unless specified, the protocol is assumed to be an exhaustive search of all species.
- **Secretive Marshbird:** Secretive Marshbird protocols follow the [Conway National Protocol Framework](#) for surveying species at points using a predefined playback sequence
- **Site Conditions:** Site Condition protocols are used in conjunction with another protocol type (Point Count, Area Search, etc\_ for recording covariate characteristics about the landscape at or around a sampling location at a give date and time. Site condition fields apply to the entire sampling event, not just a single observation or record and can include fields such as weather conditions, vegetation cover, and disturbance. Site conditions protocols can be applied to multiple projects if desired.



**Data Sharing Levels:** Each observation available in the AKN is tagged with a data sharing level as determined and set by the data owner (project leader). The AKN provides multiple data sharing levels (full details can be found on the [Data Sharing Level](https://avianknowledge.net/index.php/data-sharing-levels/) (https://avianknowledge.net/index.php/data-sharing-levels/) page.

**Core fields:** Fields that are automatically associated with a protocol, either in the event or observation table. Some core fields are required (i.e., set by the AKN) and others are not and can be suppressed so they do not show up on the user interface. Example core fields that are required are species and count.

**Extended fields:** Custom fields that are specific to your database. Extended fields may apply to a site condition protocol or an observation protocol. Once created, extended fields can be used in multiple protocols within the same protocol type (e.g. area search, point count). Extended fields are included in the project warehouse and will be part of the data downloaded through the Project Leader application, but will not be included in the AKN tools such as the Data Downloader or the Analyst.

**Project data:** Project data includes all the data as you entered it into you project. This includes all extended fields, the original distance bins, etc that are included in the protocol you use.

**Warehouse data:** Warehouse data has been formatted to fit a standard format that allows for data collected with different protocols to be analyzed together. Warehouse includes all core fields (e.g., species, count, time) and some “smoothed” fields. For example, distance bins are replaced with averages of the range of the bin to make the data comparable with protocols that record exact distance. Extended fields are not included in warehouse data.