DoD Participation in the Federal Avian Data Center: the Who, What, Where, When, Why, and How

NMFWA Workshop, March 9, 2020, Omaha, Nebraska

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Workshop Resources - materials we will use during workshop

Workshop

- Slide deck: PDF Download (WorkshopSlides - DoD and the AKN_ Who, What, Where, When , Why, and How.pdf) or Google Slides (https://docs.google.com/presentation/d/10DXI_OuI8LOivP__ocCIFLiAnm8JazvJrJwSzVAxRN4/edit?usp=sharing)
- EXERCISE 1: Create sampling units for point count (Exercise1-Create_sampling_units.pdf)
- EXERCISE 2: Enter point count observations (Exercise2-Add_observation_data.pdf)
- EXERCISE 3: Create a species list with Phenology Tool (Exercise3-Create_species_list_with_Phenology_Tool.pdf)
- EXERCISE 4: Using the Data Catalog and Observations Map (Exercise4-Explore_Data_Catalog_and_Observations_Map.pdf)
- Data entry sheet for exercises (Exercise2-DataForm.pdf)

AKN

- Federal Avian Data Center (https://data.pointblue.org/partners/fedadc/)
- Avian Knowledge Network (https://avianknowledge.net)

Our organizations

- Point Blue Conservation Science (https://pointblue.org)
- Klamath Bird Observatory (https://klamathbird.org/)

Websites - we will use some of these web tools in workshop

Get Data In

- Biologists (https://data.pointblue.org/science/biologists/)

- Project Leader (http://data.prbo.org/apps/projectleaders/)
- Protocol Search (https://data.pointblue.org/science/projectmanager/protocol_search) and Protocol Inventory (https://data.pointblue.org/science/biologists/php/protocolsearch.php)
- Bulk Uploader (https://data.pointblue.org/apps/bulk-uploader/)

Explore data

- Phenology Graph (https://avianknowledge.net/index.php/phenology-tool/)
- Observations Map (https://avianknowledge.net/index.php/observations-map/)
- Analyst (http://data.prbo.org/apps/analysts/) - point count, area search, banding
- Analyst (https://data.pointblue.org/apps/analyst/) - secretive marshbirds, transects

Discover data

- Data Catalog (https://data.pointblue.org/apps/data_catalog/)
- Data Downloader (https://data.pointblue.org/apps/downloader/)

08:00 (30min) — Welcome, Introductions, and Logistics

Welcome the the DoD / AKN workshop on using the AKN technologies for managing and utilizing avian data in the AKN.

- Welcome and introductions
- Review the workshop agenda
- Logistics: wi-fi, restrooms, workshop materials, keeping on time
- What to do if you encounter technical problems

08:30 (60min) — AKN Project Data 101

We will cover how the AKN represents observational data and how to find the best way to organize and curate your data in a project database.

- AKN Technology Overview - how do all the names you've heard fit together?
- What is a Project Database?
- What choices and decisions do you need to make?
- Data sharing, security, and ownership wrt Project Database

09:30 (60min) — Creating Project Metadata

We will cover how to create metadata in our Project Database.

- Choosing and adding protocols (DEMONSTRATION of Protocol Search (https://data.pointblue.org/science/projectmanager/protocol_search), Biologist (https://data.pointblue.org/science/biologists/) Manage Protocols for Project)
- Adding people (DEMONSTRATION of Biologist (https://data.pointblue.org/science/biologists/) Assign Researchers to Project)
- EXERCISE 1: Creating the Point Count sampling unit hierarchy (Exercise1-Create_sampling_units.pdf)

- Download the sampling units into a GIS file (DEMONSTRATION of Biologist (https://data.pointblue.org/science/biologists/) Download Locations to GPS, GIS and more)

10:30 (15min) — Break

10:45 (45min) — Entering observation data to a Project

We will cover how to enter observation data into the Project Database that is defined by the metadata we created.

- EXERCISE 2: Enter and proof a point count field survey (Exercise2-Add_observation_data.pdf)
- Downloading your point count data (DEMONSTRATION of Biologist (https://data.pointblue.org/science/biologists/) Download Observations)

11:30 (30min) — Bulk loading data to a Project

We will cover how to bulk load data into the Project Database.

- Bulk loading data tools (DEMONSTRATION of Bulk Uploader (https://data.pointblue.org/apps/bulk-uploader/)
- Office hours and bulk loading your data

Noon (60min) — Lunch

1:00 (60min) — AKN Warehouse Data 101

We will cover how data flows and is made available to other tools and users across the AKN.

- What is a Data Warehouse?
- Data sharing levels and the AKN tools that use them.
- Data sharing, security, and ownership for data in the Warehouse, and data sharing agreements.
- Setting data sharing levels (DEMONSTRATION of Biologist (https://data.pointblue.org/science/biologists/) Data Sharing Levels)

2:00 (60min) — Discovering observation data

We will cover how to discover other projects using the AKN.

- EXERCISE 3: Create a species list with Phenology Tool (Exercise3-Create_species_list_with_Phenology_Tool.pdf)
- Downloading data from a Warehouse using Data Download (DEMONSTRATION of Data Downloader (https://data.pointblue.org/apps/downloader/))

3:00 (15min) — Break

3:15 (45min) — Looking for trends

We will explore solving some of the specific problems that are faced by DoD facilities.

- EXERCISE 4: Using the Data Catalog and Observations Map (Exercise4-Explore_Data_Catalog_and_Observations_Map.pdf)

4:00 (45min) — How have others organizations fully leveraged the AKN?

We will cover how other organizations have taken full advantage of the AKN technical infrastructure.

- Klamath Bird Observatory description of how they manage observation data across many projects and how they pull them together to answer large scale conservation questions.

4:45 (15min) — Wrap-up

We will evaluate the day and see who's interested in Office Hours on Wednesday.