

DoD and the AKN: Who, What, Where, When , Why, and How

NMFWA Workshop, March 14, 2022 Spokane, WA

Michael Fitzgibbon and Sam Veloz, Point Blue Conservation Science
John Alexander, Klamath Bird Observatory
Elizabeth Neipert, US Army ERDC

pointblue.github.io/dod_workshop



Welcome, Introductions, and Logistics



Introductions

Who are we?

Who are you? (we'll call on you)

Name, Branch, Position

What type of avian data you collect?

What other avian data do you use?

A few logistics

The Agenda with links (bookmark this)
pointblue.github.io/dod_workshop

- Wi-fi access
- Restrooms, food/drink
- Session: interactive & casual
- Office hours Wednesday afternoon
- Parking lot items

Can you log in?

Biologists:

data.pointblue.org/science/biologists

Problems logging in?

Best to find a buddy or
have one of us help.

Limitations and caveats

Focus today: Point Count data

Office hours are where we can dig deeply into your installation's specific issues.

AKN Project Data 101



Federal Avian Data Center

data.pointblue.org/partners/fedadc/

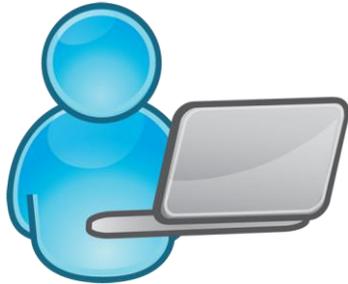
Federal Avian Data Center

Avian Knowledge Network

[Home](#) [About](#) [Uses of This Data Center](#) [Resources](#) [Help](#)



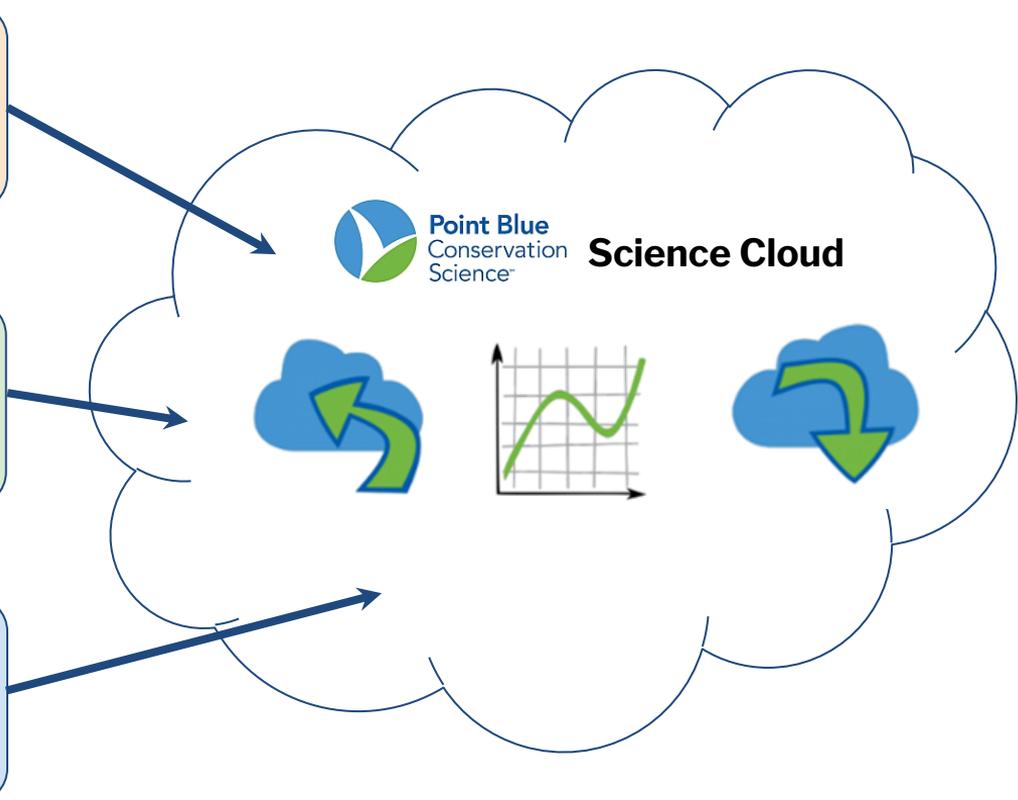
AKN: common cloud technology



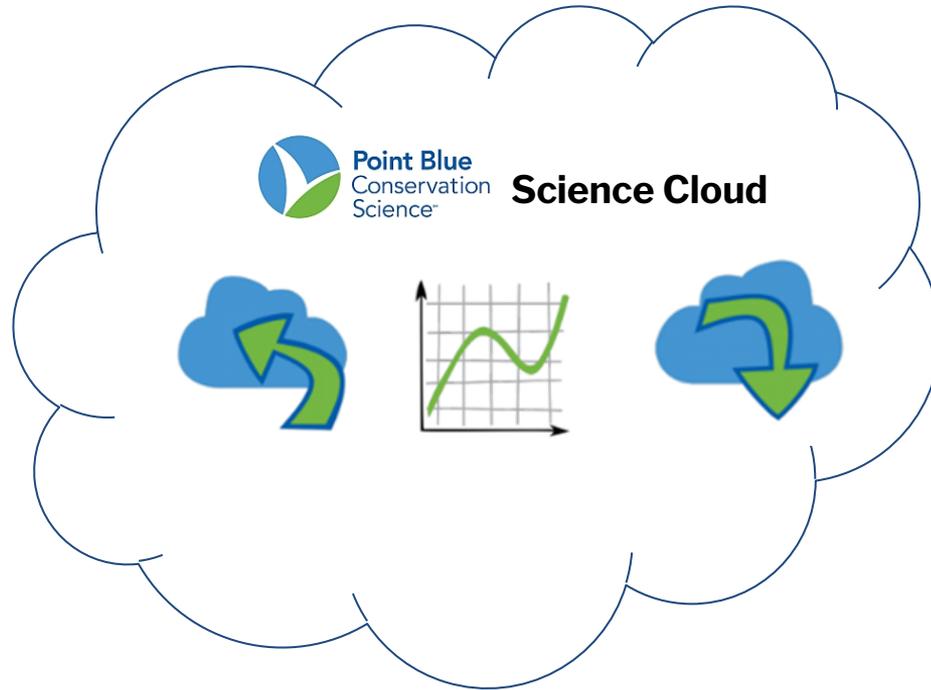
**Federal Avian
Data Center**

**Avian
Knowledge
Northwest**

**Midwest
Avian Data
Center**



Focus for this workshop



How do we represent protocol-based science?

How do you get data in?

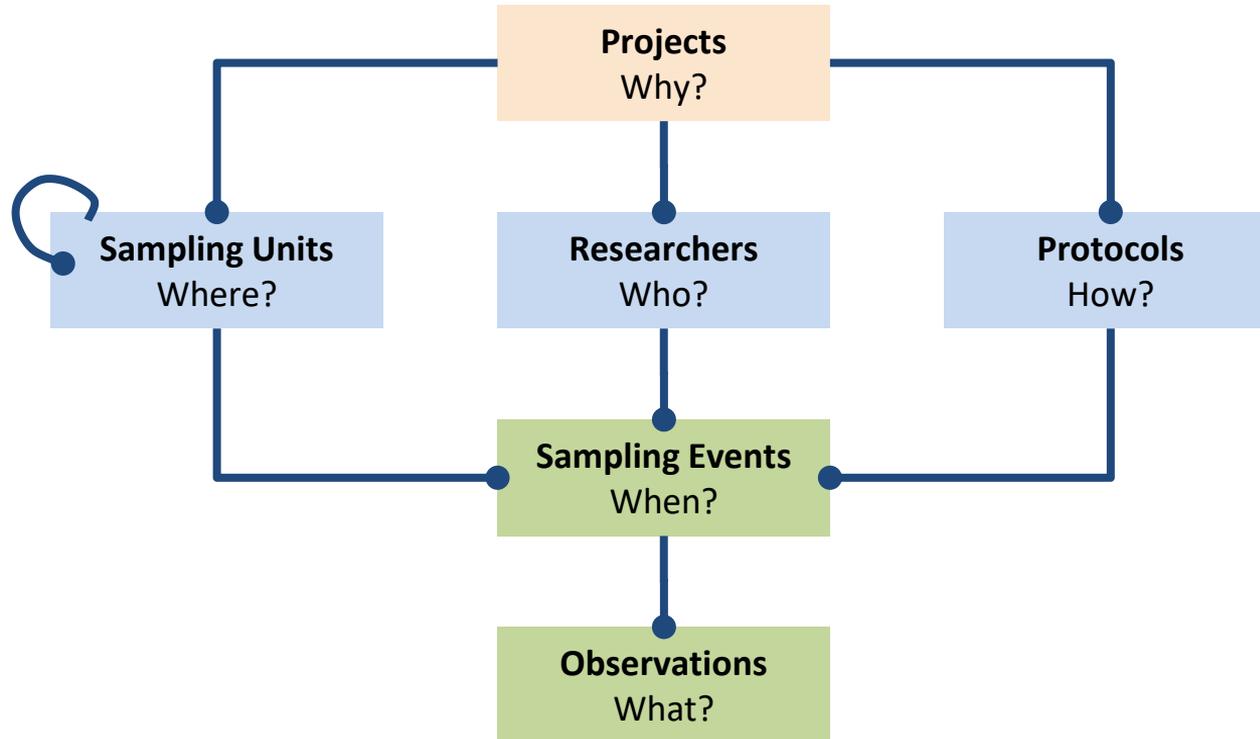
How do you data & information out?

What conservation questions can you answer?

AKN Project Data 101

1. The parts of a Project Database
2. The workflow for creating a Project

The Project Database



Project

Container for Event and Observation data

Many ways to organize

For DoD: Project = Installation or State

DoD Programs and Projects

DoD Program

Air Force
Subprogram

Installation
Project databases

Army
Subprogram

Installation
Project databases

Navy
Subprogram

Installation
Project databases

Marine
Subprogram

Installation
Project databases

National Guard
Subprogram

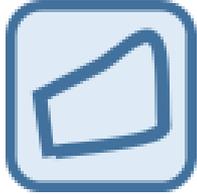
State
Project databases

Protocols

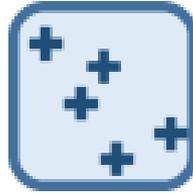
The *metadata* describing the methods and mechanics of how observations were collected

Should provide enough information for researcher 20 years from now to understand the methods you used

Primary Protocol Types



Area Search



Point Count



Linear Transect



Secretive Marshbird



Site Conditions

Protocols
How?

Point Count Protocols

Duration of survey at each point

Time (binned)

Distance (binned or exact), maximum

Detection codes

Can include **breeding behavior**

Assumed **exhaustive** survey

Each animal **counted once**

Point Count Protocol Examples

Compare how 3 field methodologies represented

[Knutson \(USFWS\) protocol](#)

[Point Blue protocol](#)

[KBO protocol](#)

Protocols
How?

Sampling Units

The locations where observations are collected

Organized into a tree (hierarchy)

Uniquely named with Project

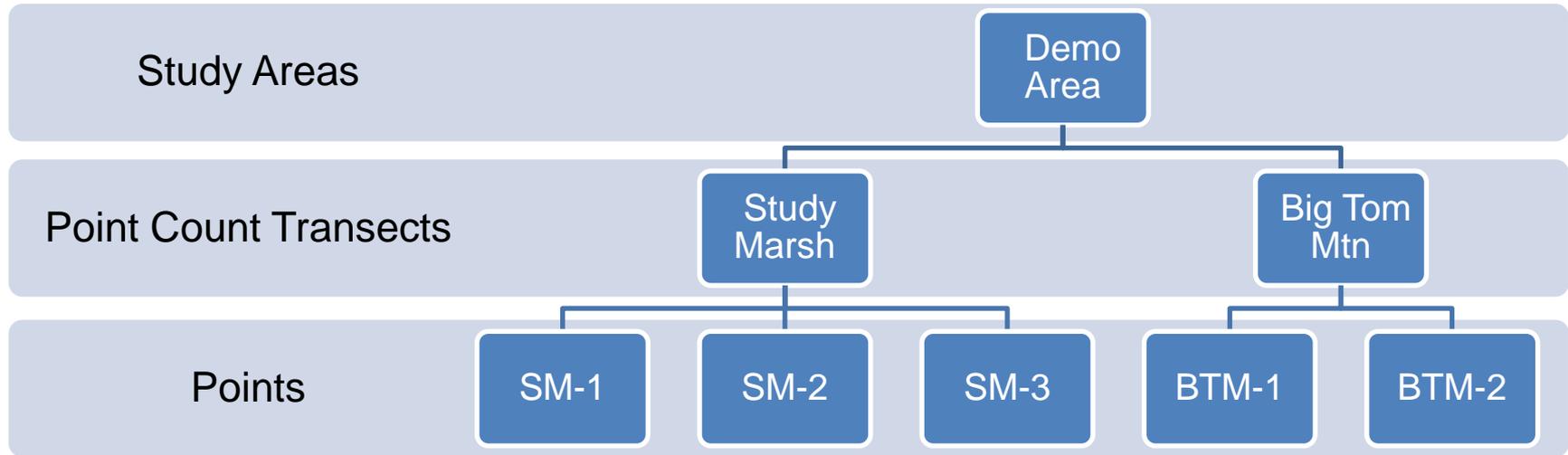
Can have Point/Line/Polygon



Sampling Unit Types for Point Counts



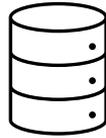
Project: DOD_DEMO



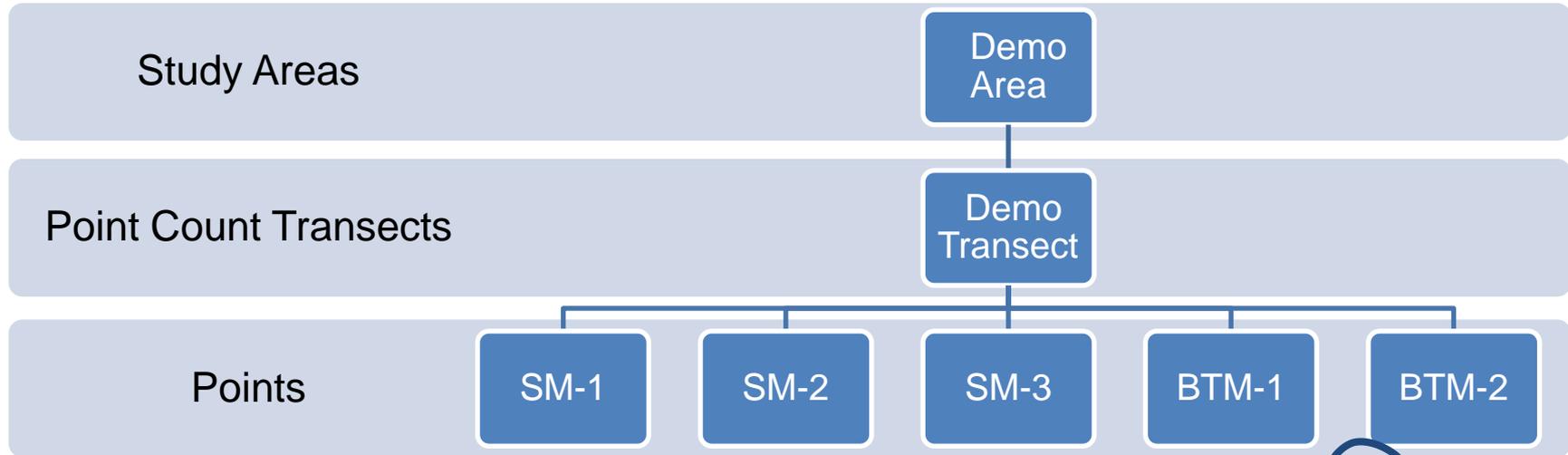
Replicates or independent points?
What questions are you asking?

Sampling Units
Where?

Sampling Unit Types for Point Counts



Project: DOD_DEMO



Replicates or independent points?
What questions are you asking?

Sampling Units
Where?

Researchers

People identified in a Project for getting access and/or who made observations

Created by user registration (for active users) or manual entry (for historical data)

Researchers
Who?

Researcher Types

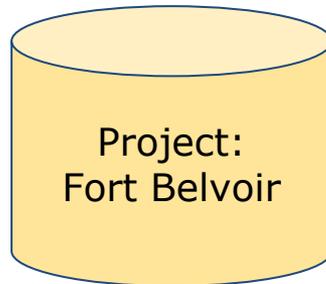
Project Leader: the data owner, has full control over data, metadata, and who gets Project access

Biologist: can enter and review data in the Project

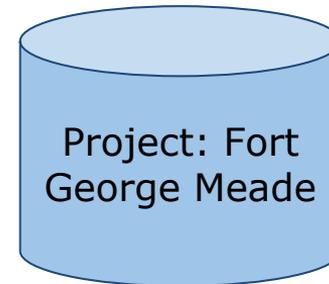
Researchers
Who?

Researchers & Project Access

Access Project assigned by Project Leader



Jane: Project Leader
Mike: Biologist
Pat: Biologist

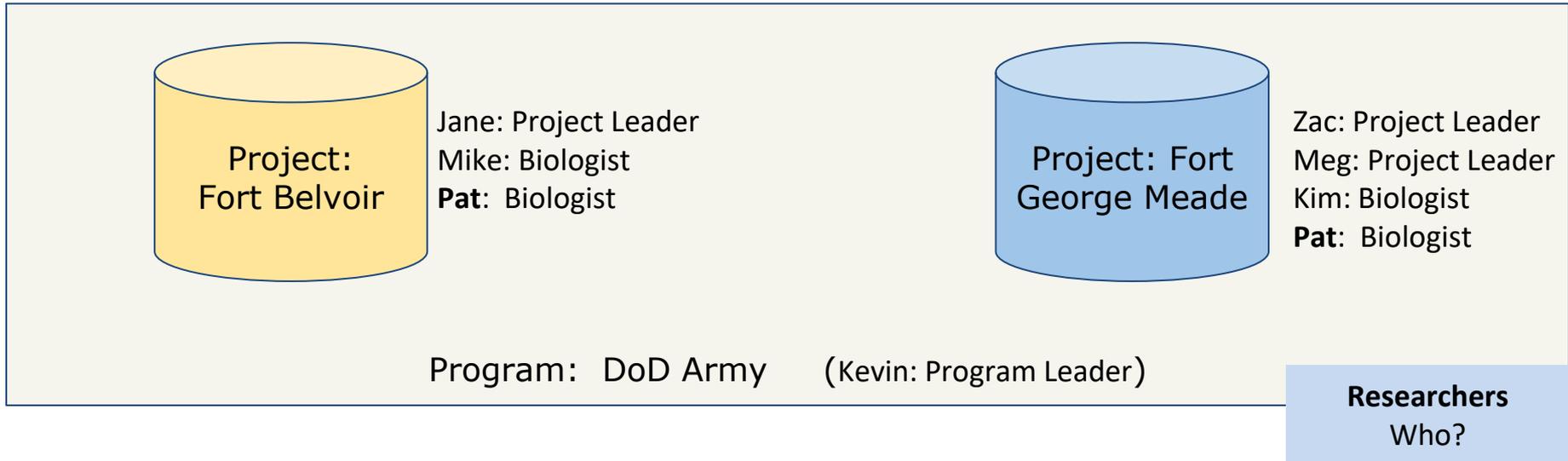


Zac: Project Leader
Meg: Project Leader
Kim: Biologist
Pat: Biologist

Researchers
Who?

Researchers & Project Access

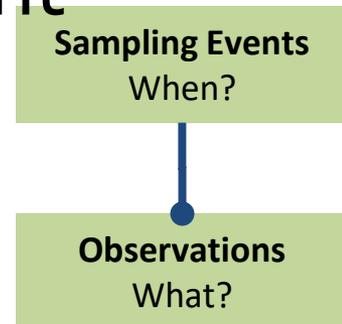
DoD will also have a Program Leader (managed by Point Blue staff w/ guidance from DoD leadership)



Sampling Events and Observations

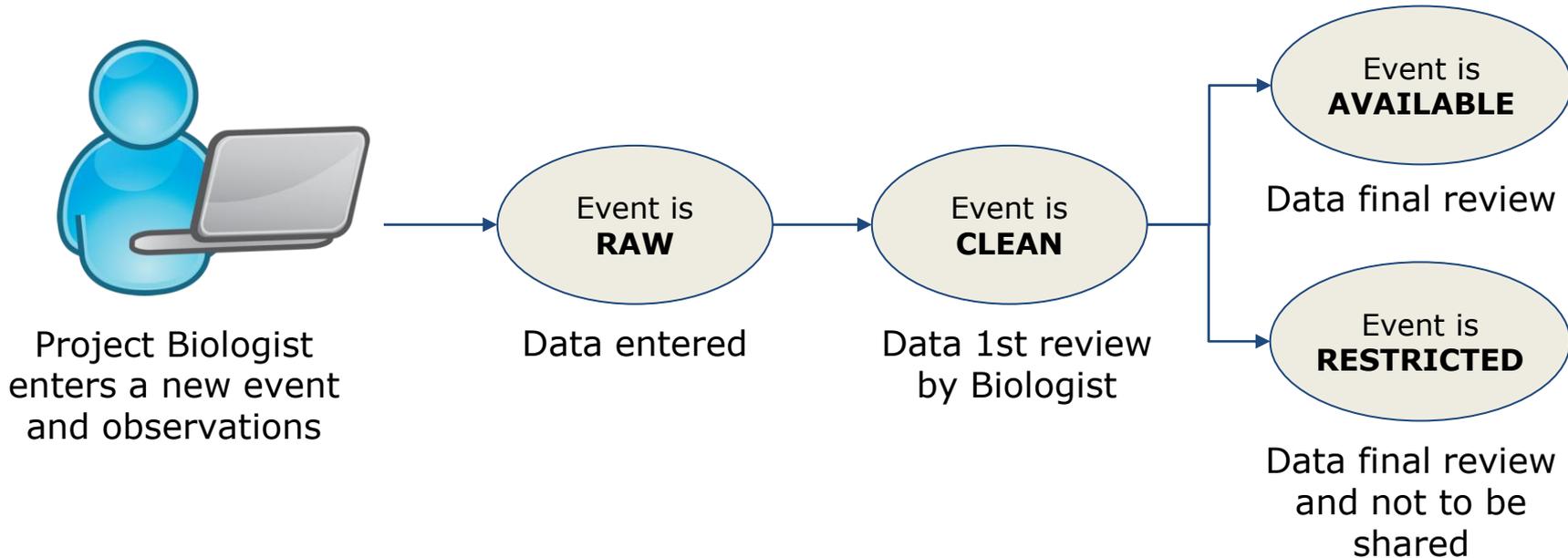
Event: survey at a Sampling Unit using a Protocol by Researcher at a specific date and time

Observation: one or more animal of a single species detected during an Event

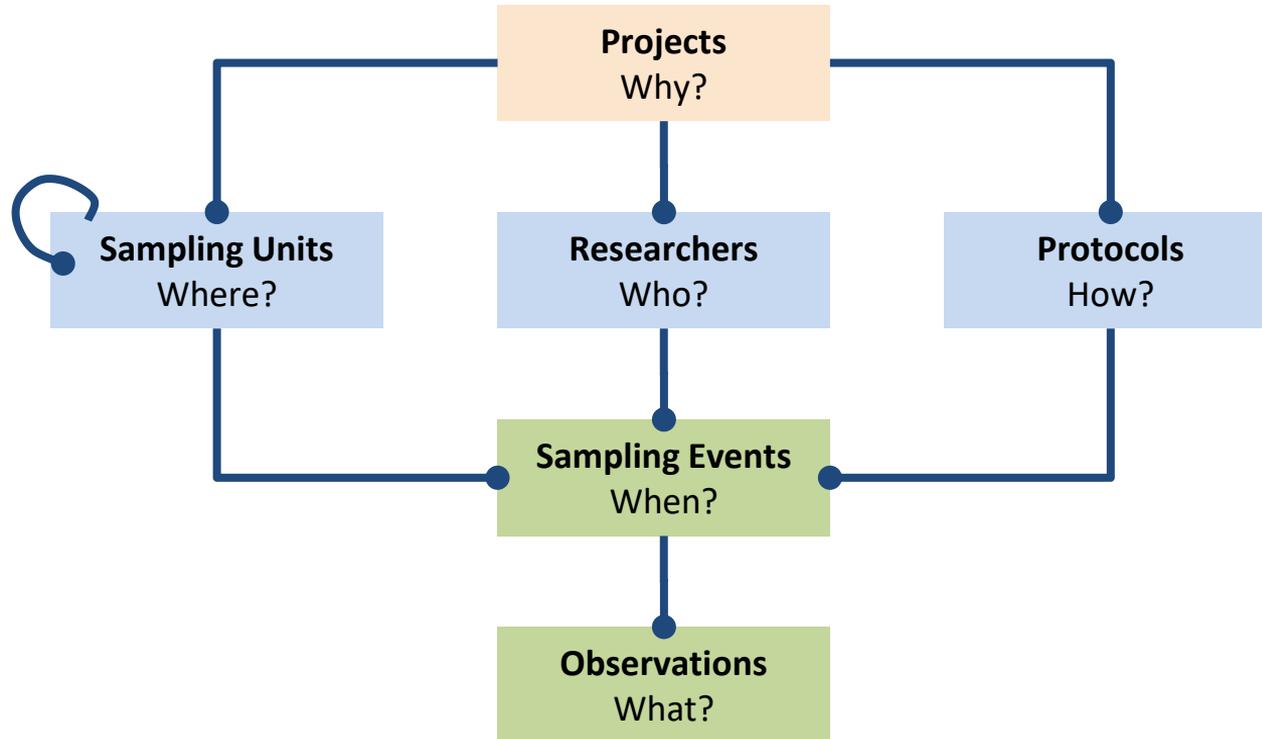


Review Levels for each Event

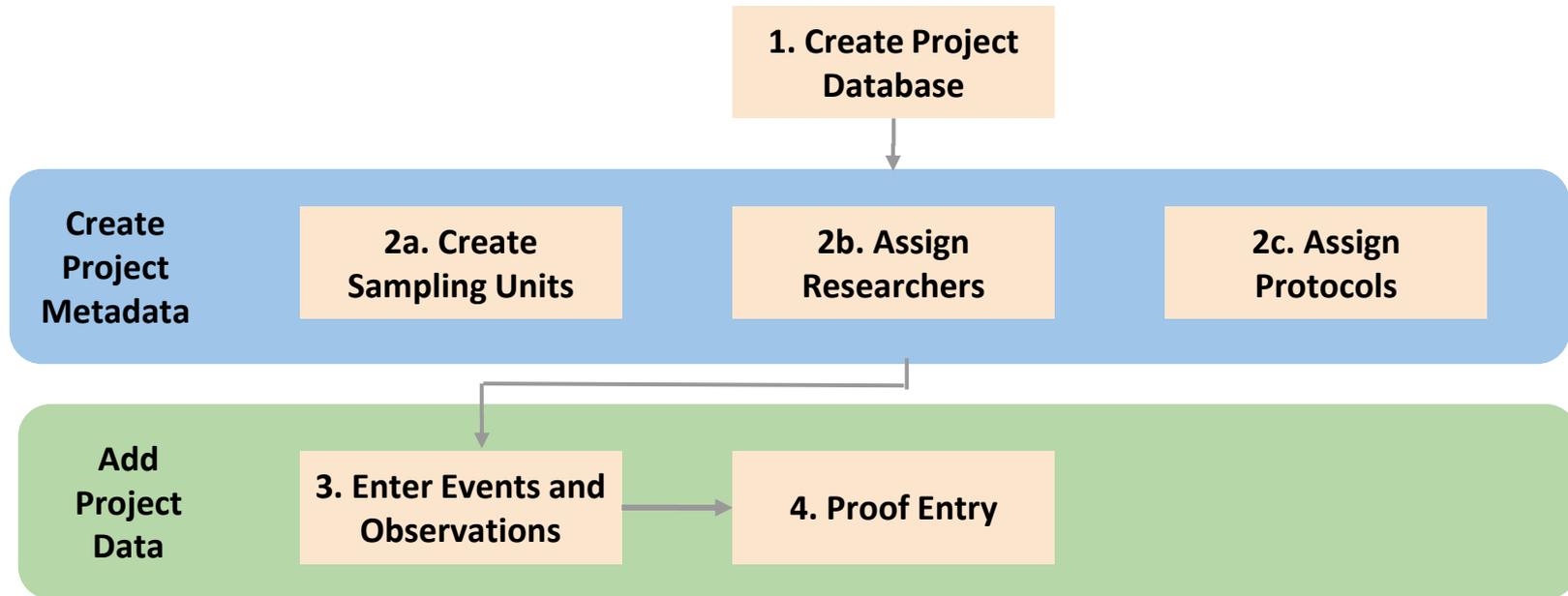
Steps to enter and review data in preparation for sharing



Questions on Project Database?



Workflow for Creating a Project



Creating Project Metadata

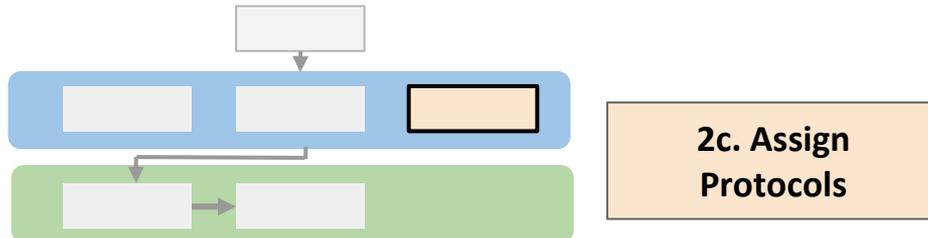


Choosing Protocols (demonstration)

Goal: select Point Count and Site Conditions protocols that match data sheet

Tools:

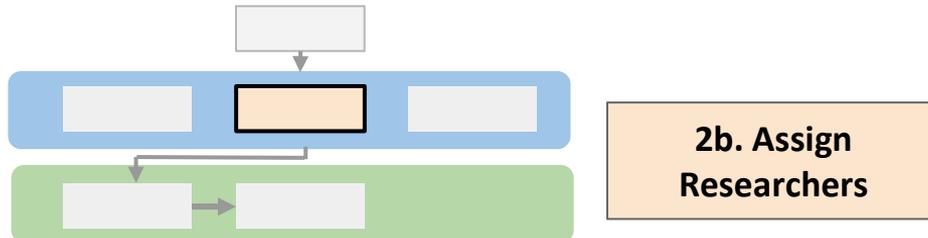
- [Our data sheet](#)
- [Protocol search tool](#)
- [Biologists](#) for adding protocol to project



Adding Researchers (demonstration)

Tools:

- [Biologists](#) for adding researchers to Project



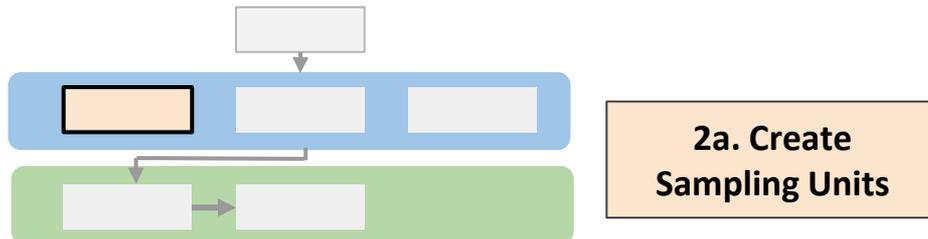
Create Sampling Units (Exercise 1 and demonstration)

Exercise:

- [Exercise 1 instructions](#)

Downloading the sampling units:

- [Biologists](#) for download locations to GPS, GIS and more



Break (15 mins)

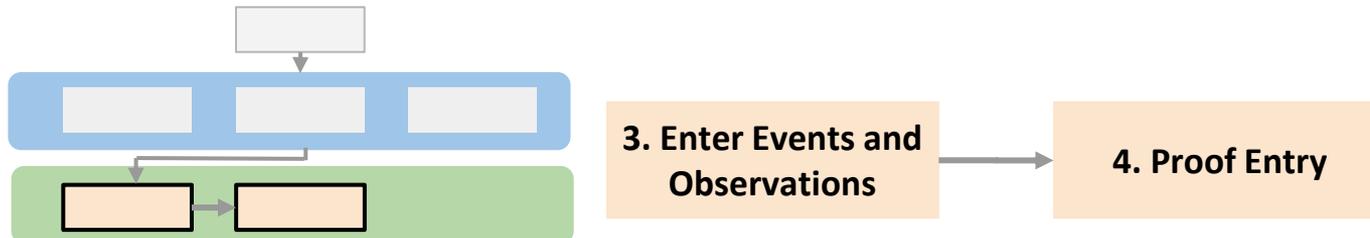
Entering observation data to a Project



Enter & proof point count event (Exercise 2)

Exercise:

- [Exercise 2 instructions](#)
- okay not to follow data sheet exactly



Download Point Count Data from Project (demonstration)

Tools:

- [Biologists](#) for download observations from our Project

Bulk loading metadata & observation data into a Project



Bulk Loading Data

Loading spreadsheet data into the Project Database for loading Researchers, Sampling Units, and Observations

Observations: Uses definition file to describe how your spreadsheet maps into AKN

Batch Processing

Bulk Uploader v2 - Beta

Follow the steps below to load data in bulk into your project.

First, select the Project you want to bulk load into

FORT_HOOD - [DOD_ARMY] Fort Hood

Next, select the Tool you want to use

Each tool independently does a task that helps you bulk load data into your project. Many of the tools process data and results can be found in the Batches tool.

[Add Researchers](#) [Add Sampling Units](#) [Add Observations](#) [Add Protocol](#) [Batches](#)

Results:

Batches for project FORT_HOOD

The table is showing all batches for this project. Click on a row to get the batch result details when St

[Save as CSV](#) [Refresh list](#)

ID	Utility	Status	Status Detail
455	AddSamplingUnits	success	batch completed successfully
454	AddSamplingUnits	error	batch completed with errors
453	AddObservations	success	batch completed successfully
452	AddObservations	error	batch completed with errors
451	AddObservations	error	batch completed with errors
450	AddObservations	error	batch completed with errors
449	AddObservations	error	batch completed with errors
448	AddObservations	error	batch completed with errors

Results:

Errors:

Error line 744: Value not allowed for weatherwinddirectioncardinal: East Northeast
Error line 1055: The count field is required.

Add Observations Summary: CSV Rows Reviewed: 1054

Batch ID 451
AddObservations
plimptonc@gmail.com

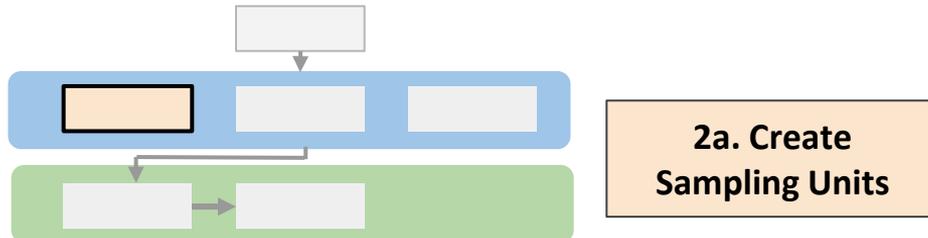
Results:

Add Observations Summary: CSV Rows Reviewed: 1054, New PointCount Events created: 217, New PointCount Observations created: 1045, New PointCount SiteConditionEvents created: 217, New PointCount SiteConditionProperties created: 1207

Bulk load sampling units (Exercise 3)

Exercise:

- [Exercise 3 instructions](#)
- okay not to follow instructions exactly



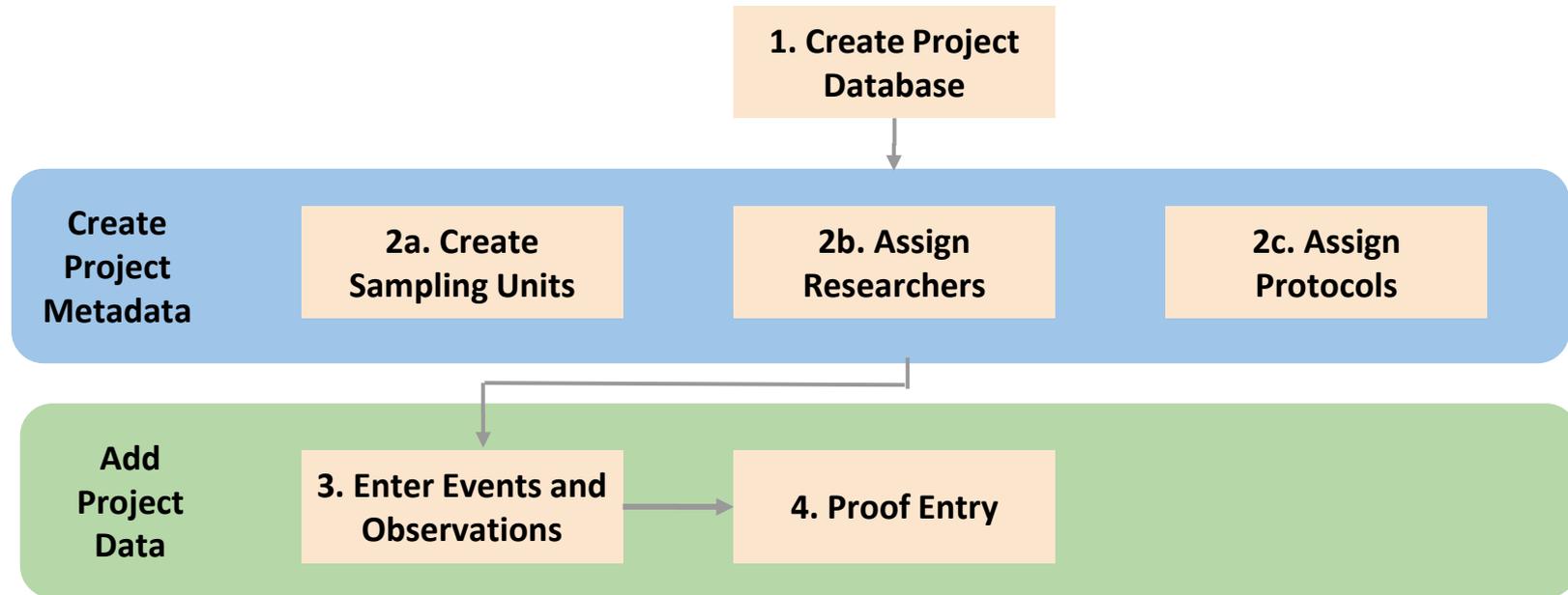
Office Hours

Discuss bulk loading and other issues regarding **your** observation data

Wednesday 16 March from 1300-1700
Meeting Room 8

Sign up sheet available

Any questions on Creating a Project?



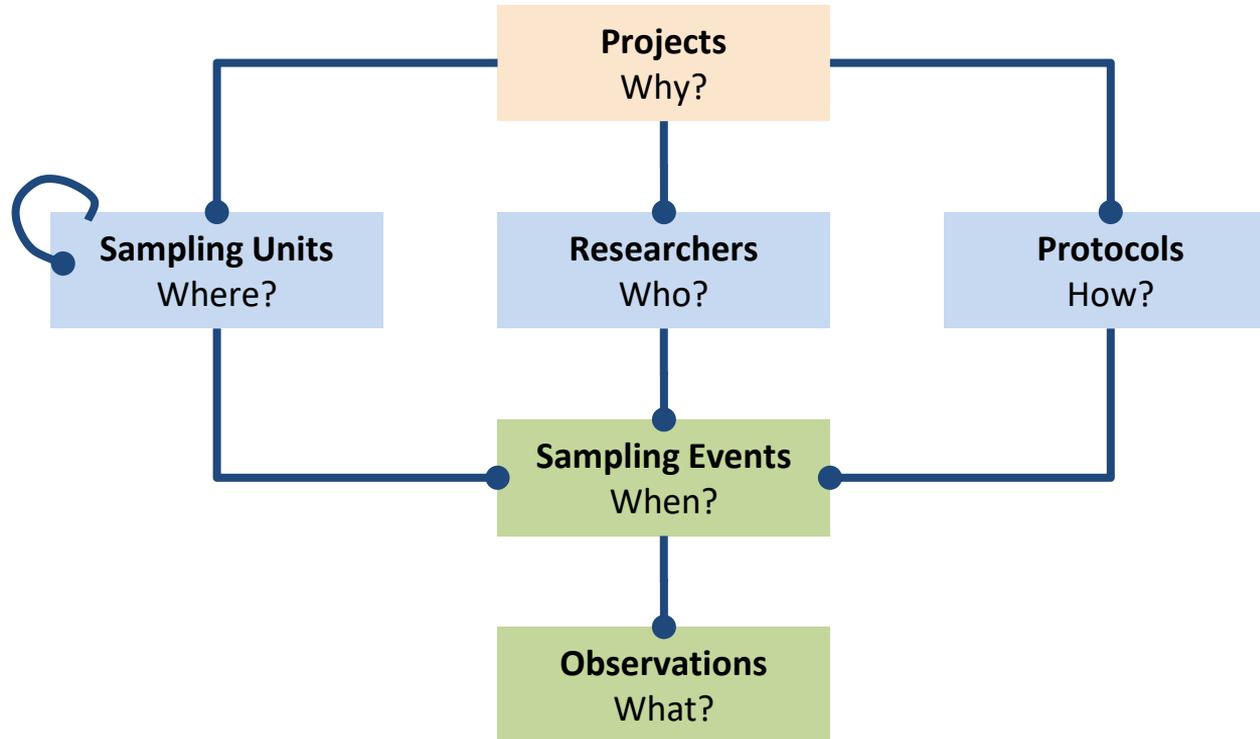
Lunch (60 mins)



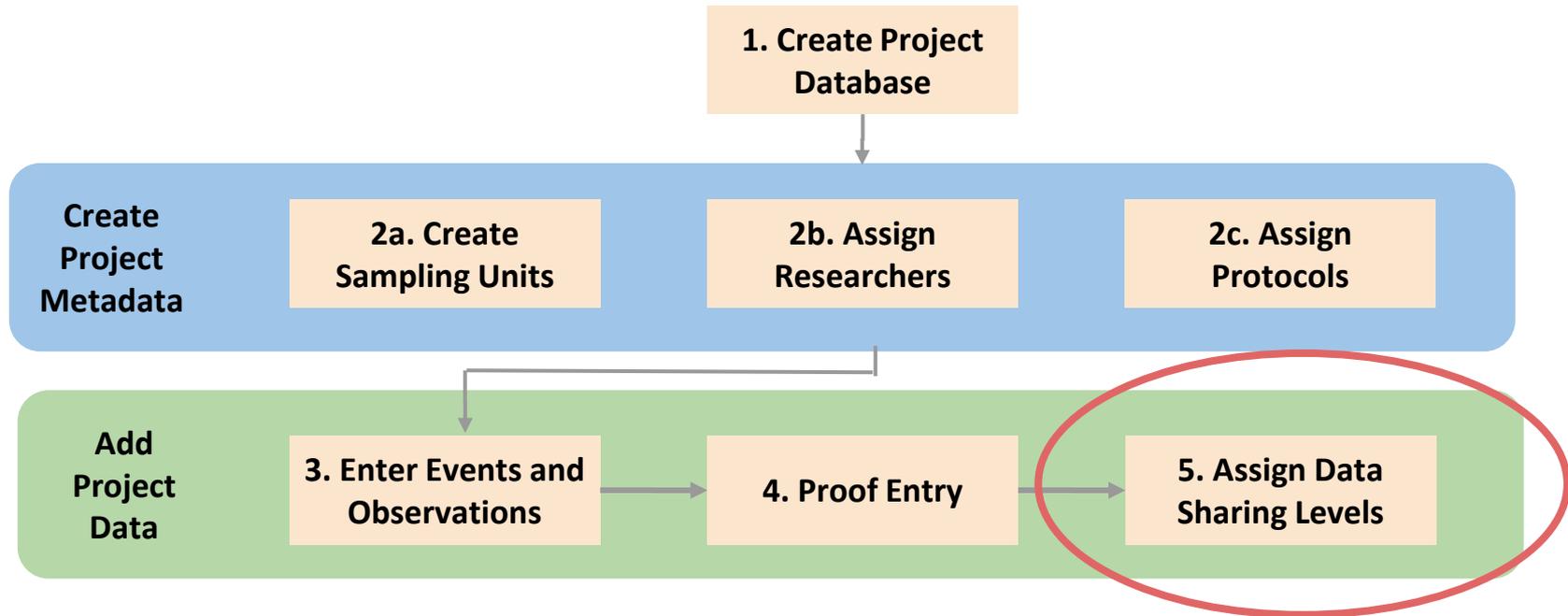
AKN Warehouse Data 101



The Project Database



Workflow for Creating a Project



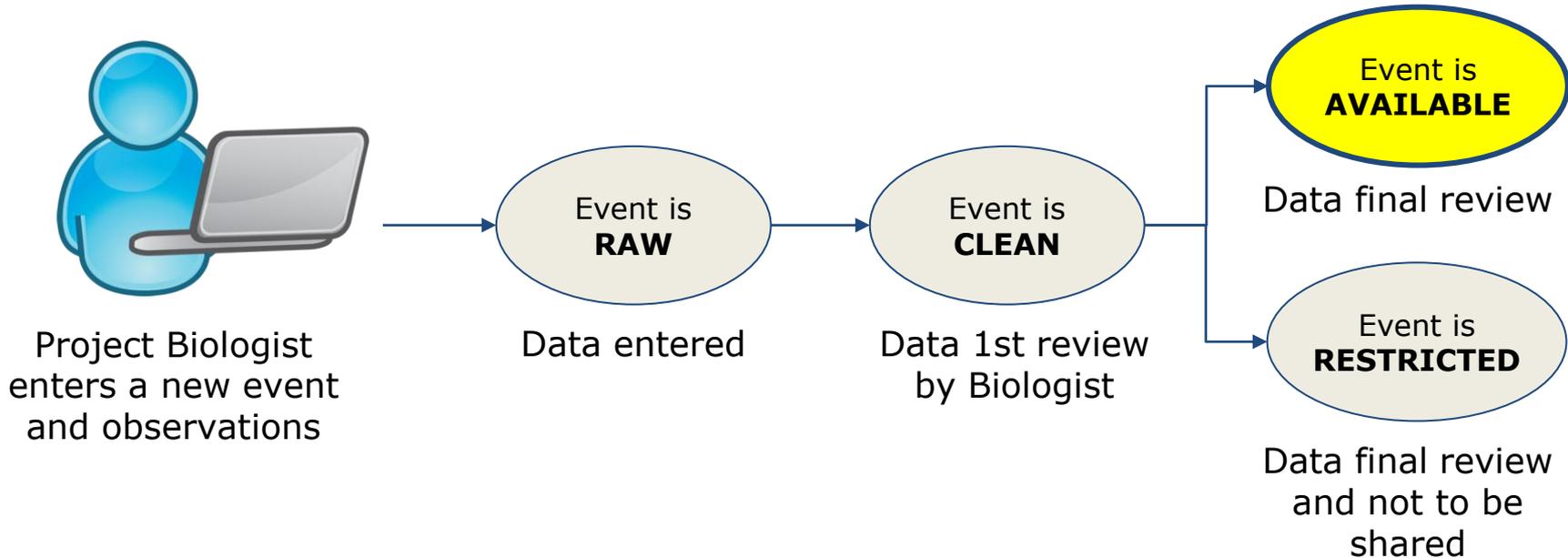
Data Sharing Levels

Defines how visible each observation is for querying, summarizing, visualizing, and analyzing.

Controlled by the Project Leader within each project

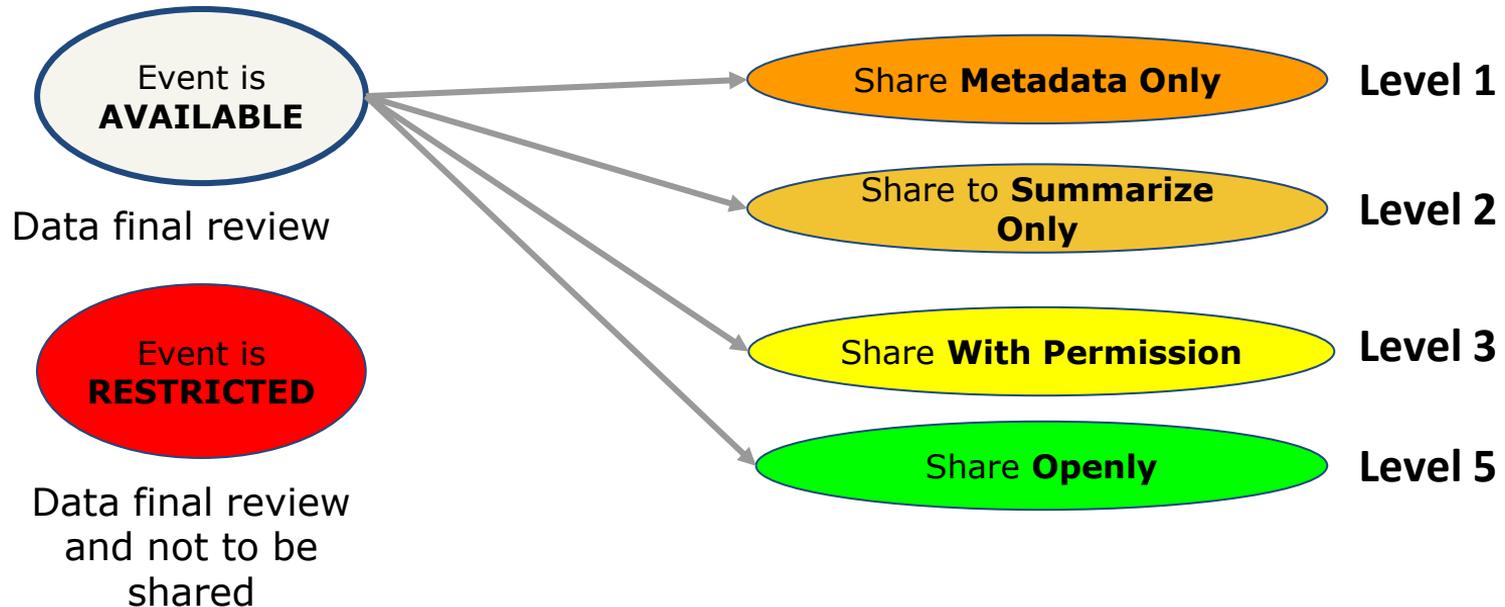
Review Levels for each Event

Steps to enter and review data in preparation for sharing



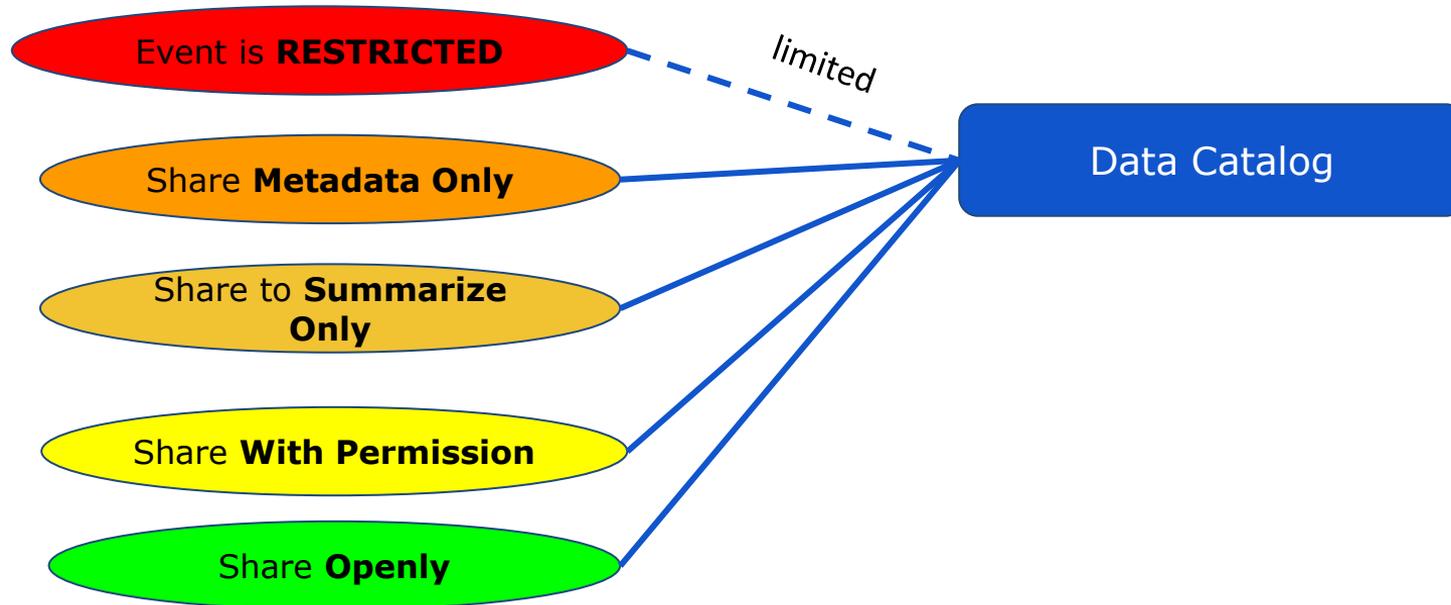
Data Sharing Levels for each Event

Choices informs the Point Blue Science Cloud tools of your intentions.



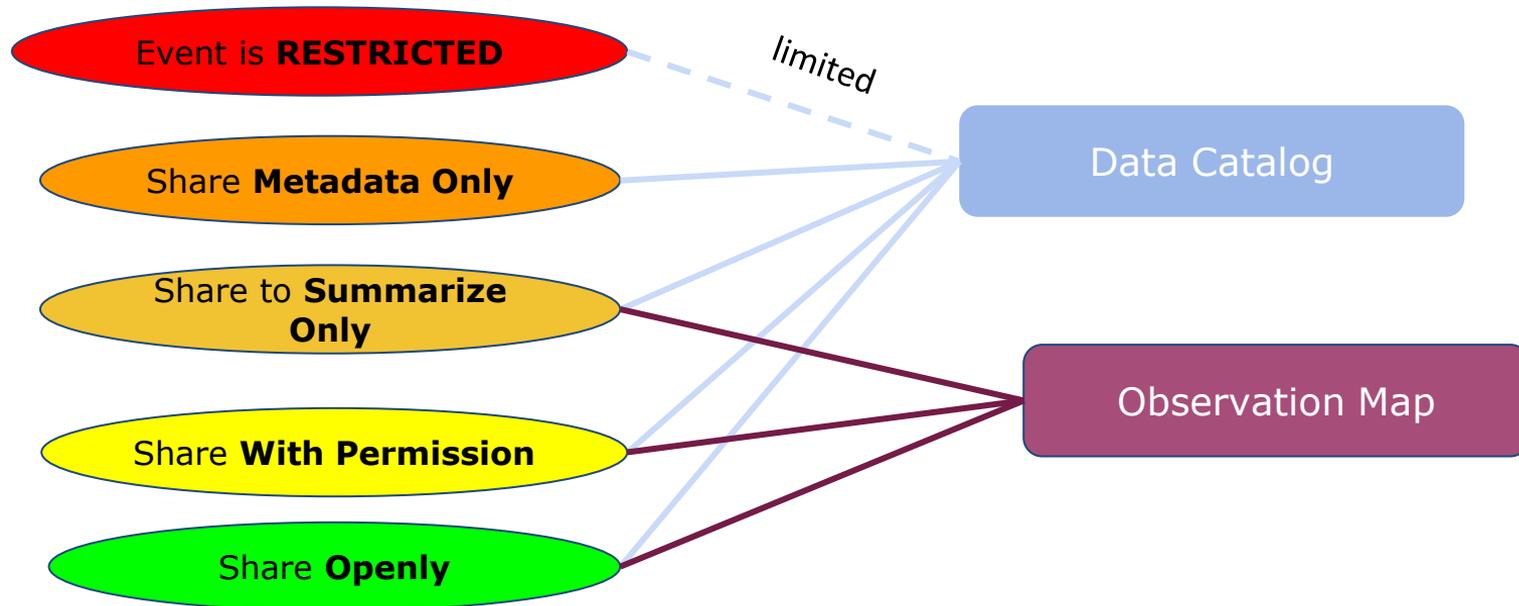
Data Sharing and Tool Access

Choices informs the Point Blue Science Cloud tools of your intentions.



Data Sharing and Tool Access

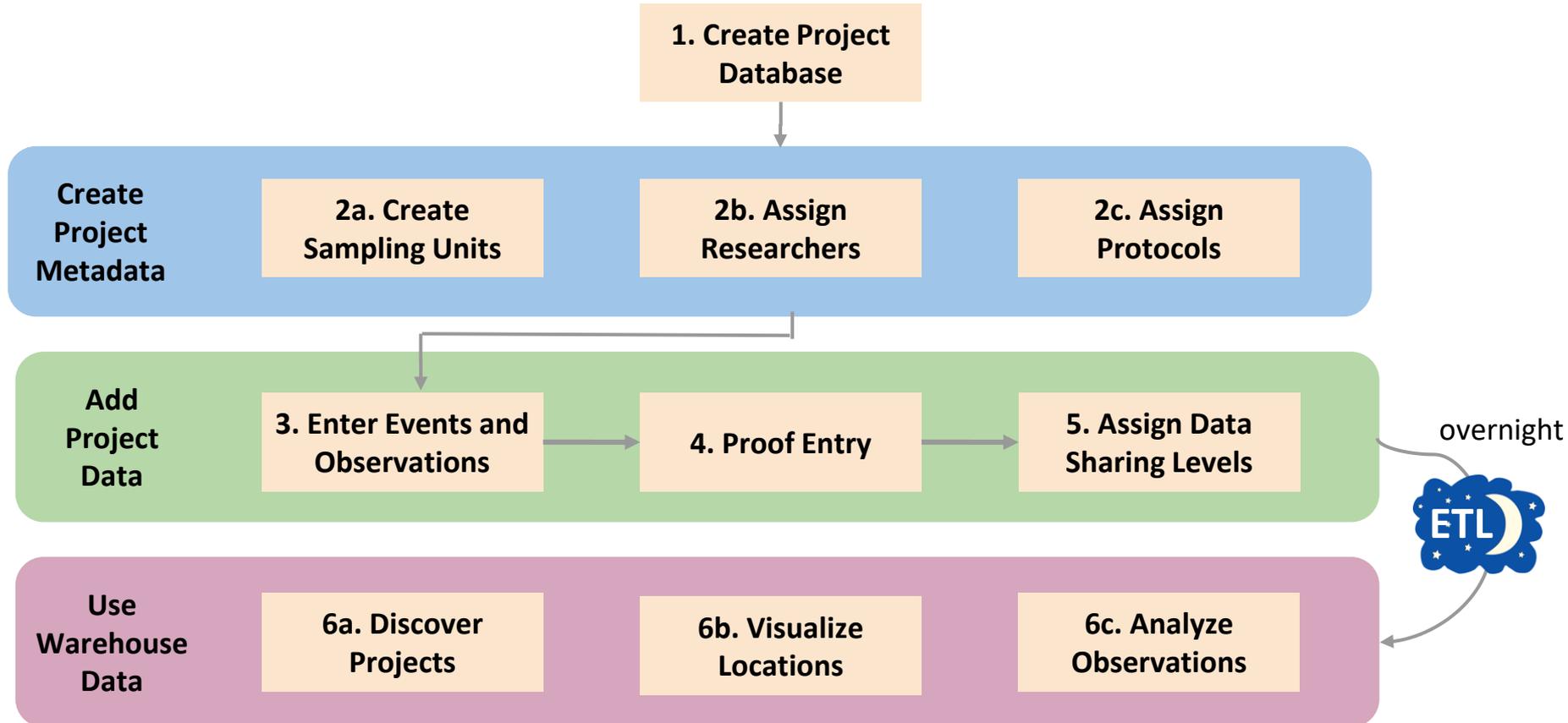
Choices informs the Point Blue Science Cloud tools of your intentions.



Data Sharing Level Motivation

- Organizational Policy
- Federal / State Law
- Research and Right of First Publication
- Threatened / Endangered Species
- Private Landowner Agreements
- Contribute to AKN Science
- Partnership / Collaboration Development

Workflow for Creating a Project



Data Warehouses

Database that with homogenized copy of observation data, *organized by sampling method* for cross-project query and analysis

Project data input today shows up automatically in the warehouse the day after you enter it

Project Data vs Warehouse Data

Study Area	Transect	Point	Protocol	Visit	Date	Start Time	End Time	Time Bin	Count	Spp	Common Name	Scientific Name	Detection	Distance	B Distance	Point Note	Obs	Researcher	Data Status
LITTLERIVER	COMP_5	164	3_5_10m2	1	6/3/2019	8:01:00	8:11:00	3 0_3min	1	PIWA	Pine Warbler	Setophaga pinus	NR	G25	25 to 50	Light sprinkle, light rain		Arbour, David	AVAILABLE Level 5
LITTLERIVER	COMP_5	164	3_5_10m2	1	6/3/2019	8:01:00	8:11:00	3 0_3min	1	GCFL	Great Crested Flycat	Myiarchus crinitus	NR	G50	50 to 100	Light sprinkle, light rain		Arbour, David	AVAILABLE Level 5
LITTLERIVER	COMP_5	164	3_5_10m2	1	6/3/2019	8:01:00	8:11:00	3 0_3min	1	KEWA	Kentucky Warbler	Geothlypis formic	NR	G50	50 to 100	Light sprinkle, light rain		Arbour, David	AVAILABLE Level 5
LITTLERIVER	COMP_5	164	3_5_10m2	1	6/3/2019	8:01:00	8:11:00	10 5_10min	1	BHCO	Brown-headed Cowbird	Molothrus ater	NR	G50	50 to 100	Light sprinkle, light rain		Arbour, David	AVAILABLE Level 5

Project	Location	Protocol	Date	Time	HabitatPlot HabitatPlotId	Composition Vine	Composition Cane	Composition Overstory	Composition Midstory	Composition Understory	Researcher
LITTLERIVERNWR	164	FWS_PC_HAB_LWRMISS	6/3/2019	8:01:00	164	3	1	3	3	4	Arbour, David

Project Database Version
Warehouse Version

GlobalUniqueIdentifier	ProjectCode	ProjectName	LocalityID	StudyArea	Transect	TransectName	Point	SamplingU	ParentSam	Sam
URN:catalog:PRBO:LITTLERIVERNWR.300600.PointCount.3_5_10m25_50_100MflyByTm.329406.1	LITTLERIVERNWR	Little River NWR	LITTLERIVERNWR:COMP_5	Little River NWR	COMP_5	Compartment_5	164	300600	348115	Point
URN:catalog:PRBO:LITTLERIVERNWR.300600.PointCount.3_5_10m25_50_100MflyByTm.329406.2	LITTLERIVERNWR	Little River NWR	LITTLERIVERNWR:COMP_5	Little River NWR	COMP_5	Compartment_5	164	300600	348115	Point
URN:catalog:PRBO:LITTLERIVERNWR.300600.PointCount.3_5_10m25_50_100MflyByTm.329406.3	LITTLERIVERNWR	Little River NWR	LITTLERIVERNWR:COMP_5	Little River NWR	COMP_5	Compartment_5	164	300600	348115	Point
URN:catalog:PRBO:LITTLERIVERNWR.300600.PointCount.3_5_10m25_50_100MflyByTm.329406.4	LITTLERIVERNWR	Little River NWR	LITTLERIVERNWR:COMP_5	Little River NWR	COMP_5	Compartment_5	164	300600	348115	Point

DecimalLatitude	DecimalLongitude	Visit	ProtocolCode	ObservationYear	CollectionMonth	DayC	JulianDay	JulianDayV	P Time	CollectionScientificName	CommonName	SpeciesCode	Phylogenetic	DistanceFromFly	Detection	Observation	NoObserved	RecordPermissions
33.9699705	-94.70262	1	3_5_10m25_50_100MflyByTm	6/3/2019	2019	6	3	154	75	8:01:00 DA	Setophaga Pine Warb	PIWA	1696	37.5	NR	1	0	AVAILABLE LEVEL 5
33.9699705	-94.70262	1	3_5_10m25_50_100MflyByTm	6/3/2019	2019	6	3	154	75	8:01:00 DA	Myiarchus Great Cres	GCFL	1254	75	NR	1	0	AVAILABLE LEVEL 5
33.9699705	-94.70262	1	3_5_10m25_50_100MflyByTm	6/3/2019	2019	6	3	154	75	8:01:00 DA	Geothlypis Kentucky	KEWA	1718	75	NR	1	0	AVAILABLE LEVEL 5
33.9699705	-94.70262	1	3_5_10m25_50_100MflyByTm	6/3/2019	2019	6	3	154	75	8:06:00 DA	Molothrus Brown-hea	BHCO	2015	75	NR	1	0	AVAILABLE LEVEL 5

Project Data vs Warehouse Data

Point Count Data

Study Area	Transect	Point	Protocol	Visit	Date	Start Time	End Time	Time Bin	Count	Spp	Common Name	Scientific Name	Detection	Distance B	Distance B	Point Note	Obs	Researcher	Data Status
LITTLE RIVER COMP_5	164	3_5_10m2		1	6/3/2019	8:01:00	8:11:00	3_0_5min	1	PIWA	Pine Warbler	Setophaga pinus	NR	G25	25 to 50	Light sprinkle, light rain		Arbour, David	AVAILABLE Level 5
LITTLE RIVER COMP_5	164	3_5_10m2		1	6/3/2019	8:01:00	8:11:00	3_0_5min	1	GCFL	Great Crested Flycat	Myiarchus crinitus	NR	G50	50 to 100	Light sprinkle, light rain		Arbour, David	AVAILABLE Level 5
LITTLE RIVER COMP_5	164	3_5_10m2		1	6/3/2019	8:01:00	8:11:00	3_0_5min	1	KEWA	Kentucky Warbler	Geothlypis formic	NR	G50	50 to 100	Light sprinkle, light rain		Arbour, David	AVAILABLE Level 5
LITTLE RIVER COMP_5	164	3_5_10m2		1	6/3/2019	8:01:00	8:11:00	10_5_10min	1	BHCO	Brown-headed Cowbird	Molothrus ater	NR	G50	50 to 100	Light sprinkle, light rain		Arbour, David	AVAILABLE Level 5

Same: Species, Count, Protocol, Locations, Detection Cues, Observation Time, Data

Sharing Levels

Differences: Binned Distance averaged, Comments missing, no Site Conditions, Observer Names to Initials, no Times Bin

ProjectCode	ProjectName	LocalityID	StudyArea	Transect	TransectName	Point	SamplingU	ParentSam	Sam
LITT LIVER NWR	Little River NWR	LITT LIVER NWR:COMP_5	Little River NWR	COMP_5	Compartment_5	164	300600	348115	Point
LITT LIVER NWR	Little River NWR	LITT LIVER NWR:COMP_5	Little River NWR	COMP_5	Compartment_5	164	300600	348115	Point
LITT LIVER NWR	Little River NWR	LITT LIVER NWR:COMP_5	Little River NWR	COMP_5	Compartment_5	164	300600	348115	Point
LITT LIVER NWR	Little River NWR	LITT LIVER NWR:COMP_5	Little River NWR	COMP_5	Compartment_5	164	300600	348115	Point

Obs	Record	Permissions
1	0	AVAILABLE LEVEL 5
1	0	AVAILABLE LEVEL 5
1	0	AVAILABLE LEVEL 5
1	0	AVAILABLE LEVEL 5

Data Sharing Guidelines/Policies and Agreements

Data Ownership and Control

Project Leaders / Organizations are the owner of data from a Project, regardless of where it is stored

Project Leaders can change Data Sharing Levels at any time, including making more restrictive

Partnerships and Contractors

Partner / Contractors

- DoD collects data for a Partnership
- Hiring independent contractors for survey work

DoD

- Wants to ask questions across DoD
- Needs to manage and control all data on installations

We want data collected on/near DoD installations in DoD Projects

System Security



Discovering observation data



DoD Mission-Sensitive Species (MSS)



Northern Bobwhite



Greater Sage-grouse



Mountain Plover



Greater Prairie Chicken



Burrowing Owl



Least Tern (Atlantic Coast)



Cerulean Warbler



Golden-winged Warbler



Pinyon Jay



Southeastern American Kestrel



Henslow's Sparrow



Rusty Blackbird



Bendire's Thrasher



Tricolored Blackbird

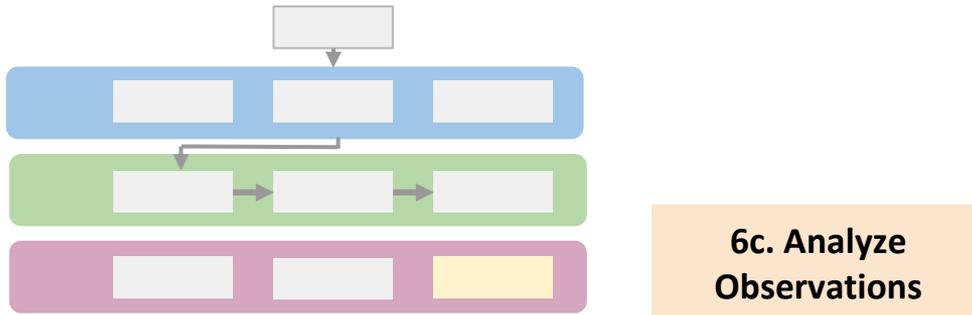


Bachman's Sparrow

Create Species List with RAIL Tool (Exercise 4)

Exercise:

- Orientation of [RAIL Tool](#)
- [Exercise 4 instructions](#)



Download Point Count Data from Warehouse (demonstration)

Tools:

- [Data Downloader](#)

Break (15 mins)

Looking for trends



Looking for Trends (Exercise 5)

Exercise:

- Orientation of [Data Catalog](#) and [Observation Map](#)
- [Exercise 5 instructions](#)



How have organizations fully leveraged the AKN?



Science to support landscape level conservation

- Data integration for landscape-scale conservation analysis.
- Understanding climate change effects on species and ecosystems.
- Identify projected future biodiversity hotspots
- Provide interfaces to, geospatial and baseline data fundamental to understanding climate change effects

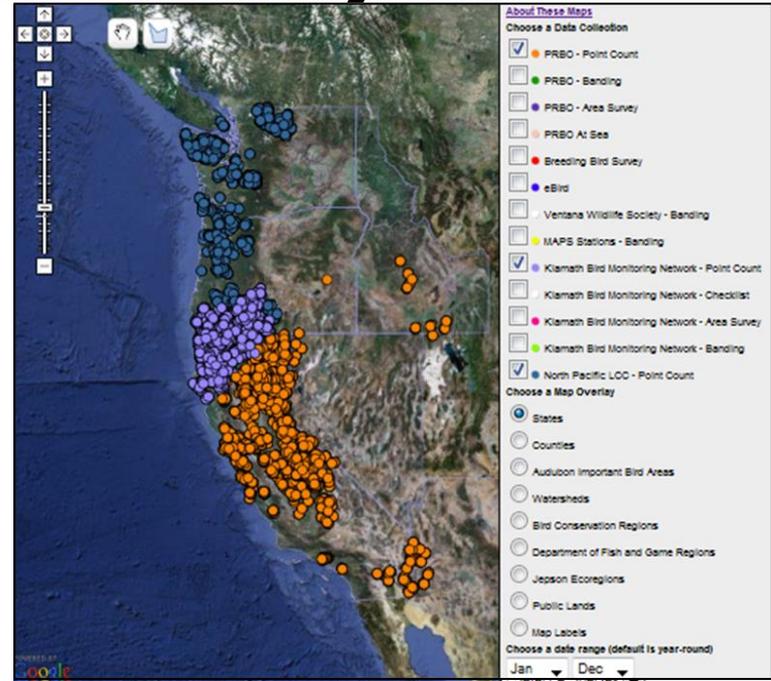


Click on an ecoregion in the map below to access more data and tools in that area.



Data integration for landscape level conservation analysis

17 Data contributors:
23 datasets
Over 900,000 new records



Understanding climate change effects on species

White-breasted Nuthatch

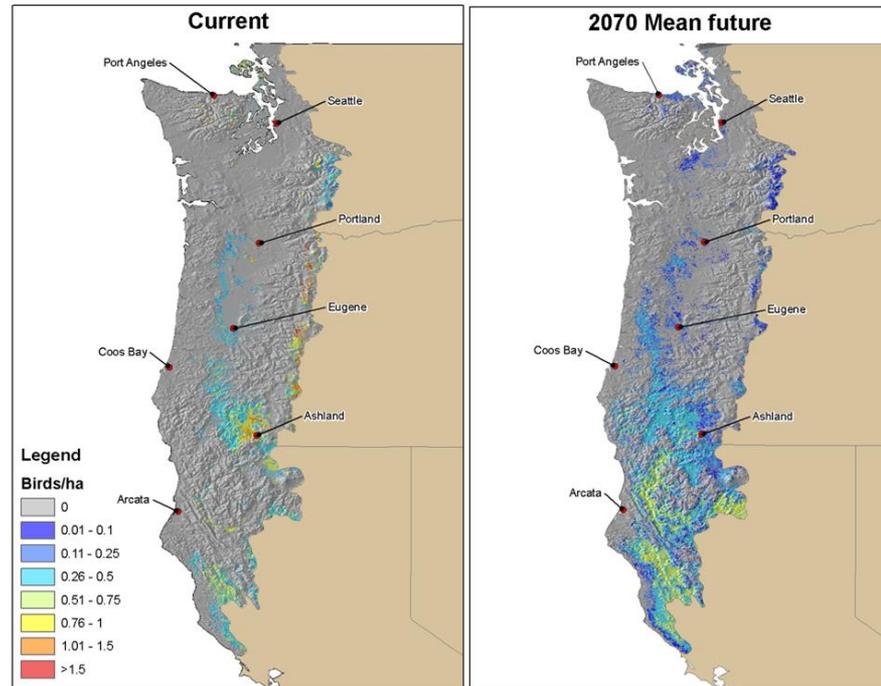
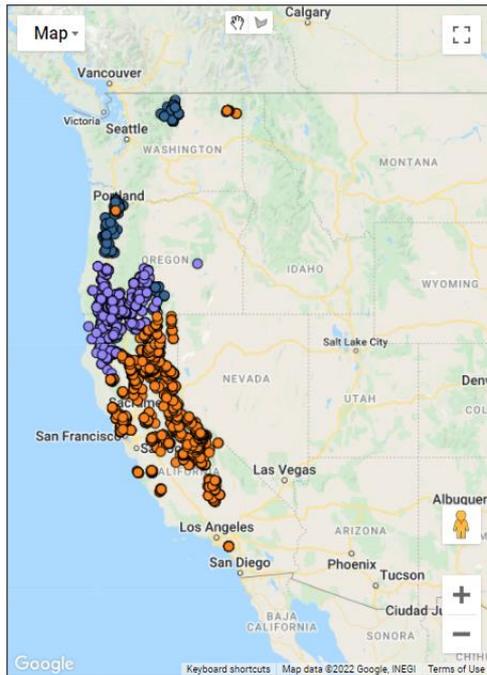


Photo (c)
Peter LaTourrette

Identify Projected Future Biodiversity Hotspots

Global synthesis of conservation studies reveals the importance of small habitat patches for biodiversity

Brendan A. Wintle^{a,1}, Heini Kujala^a, Amy Whitehead^{a,b}, Alison Cameron^a, Sam Veloz^a, Aija Kukkala^a, Atte Moilanen^{a,1}, Ascelin Gordon^a, Pia E. Lentini^a, Natasha C. R. Cadenhead^a, and Sarah A. Belesky^b

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Island biogeography theory posits that species richness increases as small patches of habitat may be cleared without significant regu-

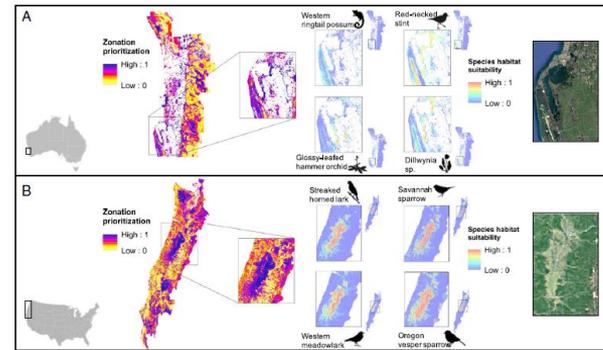


Fig. 9. Zonation models for conservation planning. (A) Zonation models for conservation planning for Australia. (B) Zonation models for conservation planning for the United States. Zonation models were generated for each species using the same methodology as in Fig. 8. The zonation models were generated for each species using the same methodology as in Fig. 8. The zonation models were generated for each species using the same methodology as in Fig. 8.

Keywords: conservation prioritization, species distribution models, species diversity, systematic conservation planning, zonation

Mejoría de la Efectividad de la Planeación Sistemática de la Conservación con Datos de Densidad

Resumen: La planeación sistemática de la conservación tiene como meta diseñar redes de áreas protegidas que cumplan con objetivos de conservación a lo largo de grandes paisajes. El diseño óptimo de estas redes de conservación se basa con mayor frecuencia en modelos de idoneidad de hábitat o probabilidad de ocurrencia de especies, a pesar de la evidencia existente de que las predicciones de esos modelos pueden no estar fuertemente correlacionadas con la densidad de especies. Hipótesisamos que las redes de conservación diseñadas con las distribuciones de la densidad de especies conservan con mayor eficiencia a las poblaciones de todas las especies consideradas que las redes diseñadas con modelos de probabilidad de ocurrencia. Para



esa ECOSPHERE
SPECIAL FEATURE: SCIENCE FOR OUR NATIONAL PARKS' SECOND CENTURY

Using regional bird density distribution models to evaluate protected area networks and inform conservation planning

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Clifford Alexander, J. D., J. L. Stephens, S. Veloz, J. S. Rousseau, C. J. Rajph, and D. A. Sarr. 2017. Using regional bird density distribution models to evaluate protected area networks and inform conservation planning. *Ecosphere* 8(5):e01799. 10.1002/ecs2.1799

Abstract. As data about populations of indicator species become available, proactive strategies that improve representation of biological diversity within protected area networks should consider finer-scaled evaluations, especially in regions identified as important through coarse-scale analyses. We use density distribution models derived from a robust regional bird abundance dataset, coupled with habitat conservation plans, to evaluate a network of protected areas and to inform conservation and biodiversity planning in the greater Klamath Siskiyou Bioregion, an area recognized globally as a region of outstanding biological diversity. Our novel modeling approach allowed for comparisons of abundance of conservation focal species on federal vs. non-federal lands, federal lands that are protected to maintain natural habitats vs. federal lands managed for multiple uses, and seven protected areas of interest. Our comparisons highlight conservation opportunities for suites of species associated with coniferous forests, oak woodlands, and grasslands. Species associated with oak woodland and grassland habitats, both habitats of conservation concern, were not well represented in the Bioregion's existing protected areas. These species would benefit from expanding the regional protected area network to include their associated avian habitats. In contrast, our results suggest that coniferous forests birds are well represented in the Bioregion's protected areas. We identify management opportunities specifically associated with the restoration of fire-adapted ecosystems that would benefit coniferous forest local species on both federally protected areas and other multiple-use lands. Our analysis provides an example of how a finer-scaled evaluation of a regional protected area network adds value to coarse-scale evaluations of protected areas and biological diversity. Data and results from this research were used to inform science-based expansion of the Bioregion's network of protected areas.

Key words: Avian Knowledge Network; birds; density distribution models; fire-adapted ecosystems; local species gap analysis; indicators; Klamath Siskiyou Bioregion/Bioregion; Partners in Flight; protected areas; Special Feature: Science for Our National Parks' Second Century.

Received 27 December 2016; revised 21 February 2017; accepted 1 March 2017. Corresponding Editor: Brooke Malco. Copyright © 2017 Alexander et al. This is an open access article under the terms of the Creative Commons Attribution License, which permits use, distribution and reproduction in any medium, provided the original work is properly cited. E-mail: jda@klamathbird.org

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Senator Merkley: “Senator Weyden and I supported President Obama’s proclamation to enlarge the Cascade-Siskiyou National Monument boundary. The results from this study, along with additional science, offered robust evidence that this monument expansion would increase protection of important habitats that are not adequately protected in Oregon.”

Identify Projected Future Biodiversity Hotspots



Species	Habitat Type	Clim. Change
Chipping Sparrow	Oak	0
House Wren	Oak	-
Purple Finch	Oak	-
Scrub Jay	Oak	0
Western Wood-pewee	Oak	-
White-breasted Nuthatch	Oak	0
Downy Woodpecker	Riparian	+
Swainson's Thrush	Riparian	+
Warbling Vireo	Riparian	+
Willow Flycatcher	Riparian	+
Yellow Warbler	Riparian	-



Current	Future
North Pacific Lowland Mixed Hardwood-Conifer Forest and Woodland	Mediterranean California Dry-Mesic Mixed Conifer Forest and Woodland
North Pacific Maritime Dry-Mesic Douglas-fir-Western Hemlock Forest	Willamette Valley Wet Prairie



Interactive web tools

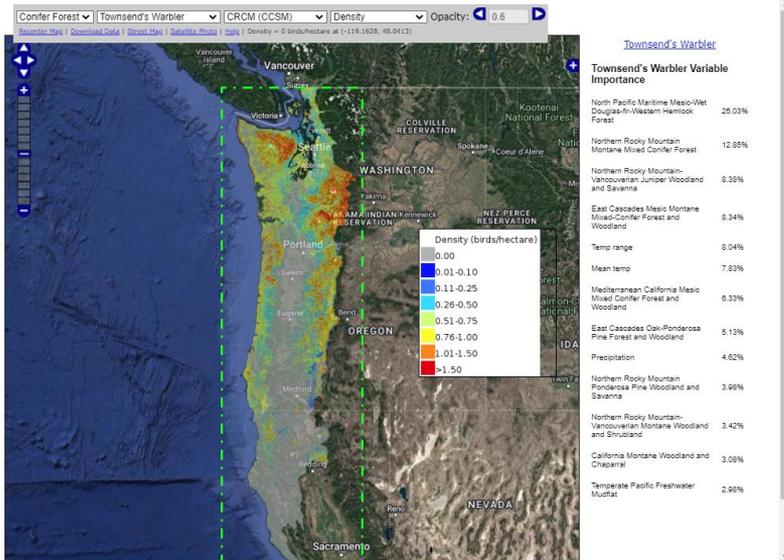
<https://data.pointblue.org/apps/nplcc/>

Bird Distribution Map

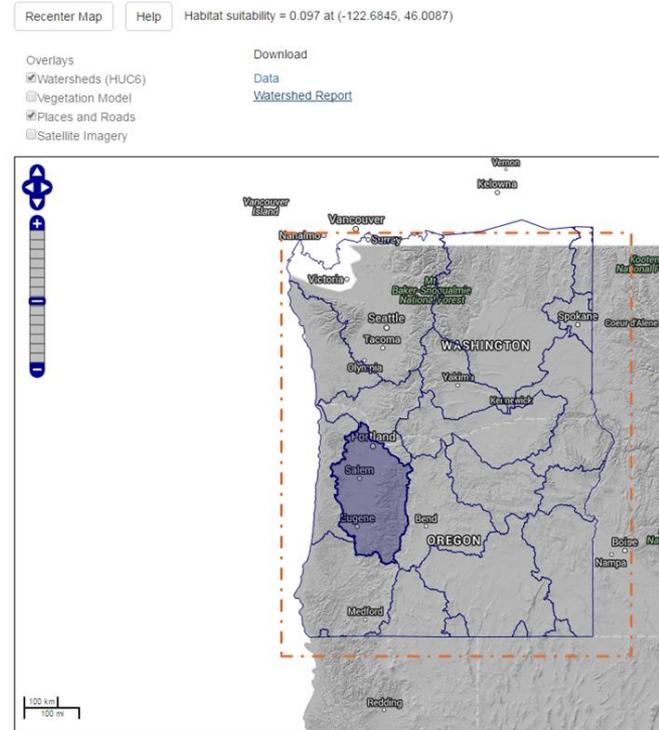
Select one of the 26 species to view how its distribution and density will respond to climate change. We provide projections for current and future (2070) climate and environmental conditions.

You can choose to view:

- Probability of occurrence
- Presence absence
- Density (birds/ha)



<http://data.pointblue.org/apps/nwsc/>



What should you expect this year with AKN, DoD, and your service branch?



Legal Drivers

- Migratory Bird Treaty Act (PL 65-186; 16 USC 703 *et seq.*)
- Sikes Act (PL 105-85, as amended through 2004 including PL 108-136; 16 USC 670 *et seq.*)
- Executive Order 13186 *Responsibilities of Federal Agencies to Protect Migratory Birds*
- DoD Instruction 4715.03, *Natural Resources Conservation Program*
- National Environmental Policy Act, as amended. (PL. 91-190, 42 U.S.C. 4321-4347, as amended by Pub. L. 94-52)
- Endangered Species Act (16 U.S.C. 1531-1544, 87 Stat. 884), as amended – PL. 93-205
 - Prioritize species
 - Facilitate and encourage collaboration with partners
 - Focus research and planning efforts
 - Increase information sharing

DoD AKN Strategic Approach

- DoD AKN Program Management Plan
- Planned Updates, Tools, Data Initiatives
- OSD and Military Services Support
- Cooperative Agreement
- Updates on Service-specific Work
- On-going Support

DoD AKN Program Management Plan

- Outlines plan/strategy for DoD and AKN
- Background and work-to-date
- Data problems and solutions
- Outline goals and objectives for program
- 5-year needs for new tools and tasks; includes rough budgets
- Approach and work plan for each task
- Agencies and organizations involved and responsibilities

DoD AKN Program Management Plan

5-Year Needs/Initiatives

▪ **Training**

- Instructor-led training courses (1 in-person and 1 virtual complete), next at NMFWA in Spokane 14 March
- Create video trainings for common actions (continuing)
- Monthly “Office Hours”

▪ **DoD-Specific Tools**

- DoD AKN portal page
- DoD user guide
- DoD data standards
- Scope of work language for contractors

▪ **Data Initiatives**

- Mission-Sensitive Species data
- MAPS and banding data (cost-share)
- BASH data

▪ **AKN Tools (partner initiatives)**

- Program query tool
- “Contractor” role
- “Analyst” role

▪ **On-going Support**

- DoD Program Management
- Historical data updates
- Technical support
- Annual maintenance

DoD Mission-Sensitive Species (MSS)



Northern Bobwhite



Greater Sage-grouse



Mountain Plover



Greater Prairie Chicken



Burrowing Owl



Least Tern (Atlantic Coast)



Cerulean Warbler



Golden-winged Warbler



Pinyon Jay



Southeastern American Kestrel



Henslow's Sparrow



Rusty Blackbird



Bendire's Thrasher



Tricolored Blackbird



Bachman's Sparrow

DoD MSS

Species	# of Installations
Greater Sage-Grouse	6
Greater Prairie-Chicken	3
Northern Bobwhite	70
Southeastern American Kestrel	14
Black Rail**	5
Mountain Plover	16
Burrowing Owl	50
Least Tern (Atlantic Coast Pop)	18
Pinyon Jay	7
Bendire's Thrasher	4
Golden-winged Warbler	24
Cerulean Warbler	30
Bachman's Sparrow	24
Henslow's Sparrow	25
Tricolored Blackbird	15
Rusty Blackbird	30

DoD MSS Initiative

DATA

- Locate historical and contemporary data
- Identify and prioritize datasets and projects for AKN integration

FIELD METHODS

- Identify SMEs for each species and categorize acceptable and appropriate survey methodologies
- Work with DoD PIF Research and Monitoring Working Group

DATA ENTRY PROTOCOL

- Upload data protocols into AKN, ready for use by any user

MSS QUERY TOOL IN AKN

- Add MSS as a guild in tools, such as Analyst and Data Downloader



OSD and Military Services Support



▪ ***Office of Secretary of Defense and Military Service Support***

- Ryan Orndorff and Liz Galli-Noble-Office of Secretary of Defense
- Karla Meyer, Kirsten Christopherson, Rebecca Meyer-Air Force
- Brian Moyer and Steve Sekscienski-Army
- Jacque Rice-Marine Corps
- Tammy Conkle and Jeff Gardner-Navy
- Jay Rubinoff-National Guard

▪ ***DoD Support Memo***

- Will hear from Ryan/OSD during DoD Policy Update tomorrow
- Memo is eminent
- Moving to mandate use DoD-wide

▪ ***DoD-wide Cooperative Agreement***

- Allows oversight of all AKN actions
- Cost-share actions
- Enable Military Services and installations to empower smaller amounts of \$\$
- Allows MIPR for funding our program partners

Military Service-Specific Actions

Air Force

- Funded two virtual trainings, dates TBD
- Funded initial training videos-COMplete; available on AKN YouTube Channel
- Funded five MSS Initiatives, BUOW first
- Funded data discovery survey, data prioritization, assistance with set number of data sets
- Awaiting DoD Memo prior to email announcement

Navy

- Funded data discovery survey and data prioritization
- Funded SOW language for contractors

Army

- Initial steps for data discovery survey for informed decisions

Marine Corps

- Developing solid 5-year investment plan for trainings, data support, and tool development

National Guard

- Need to work with States

Case studies since last AKN training



Matt Panella, MAARNG

Leaving position one week after training

Has 20+ years of data

Working through data, realized inconsistencies

Standardized protocol in system, showing required fields, to be utilized in all future surveys

Successfully uploaded 35,000 records prior to leaving DoD

Tiffany Shepherd, BMGR (AF/MC)

Participating in regional desert thrasher initiative

Critical to add data to DoD owned project and not existing desert thrasher project

Contractors conducted surveys and entered data into BMGR project using desert thrasher data entry protocol

Shared data with thrasher initiative (with Point Blue support)

Charlie Plimpton, Fort Hood

Modified existing protocol to meet data entry needs

Bulk uploaded over 3,000 rows of data

On-going Support

- ***Support This Week***

- Office Hours, Wednesday, 16 March, 1300-1700, Meeting Room 8
- Michael available tomorrow if assistance needed outside official Office Hours

- ***Monthly Virtual Office Hours***

- Monthly “Office Hours” starting in April
- Third Tuesday of the month and following Friday, 0900-1300 PST
- Announcements on Legacy and DoD PIF listservs

- ***Other Opportunities***

- Training videos on AKN YouTube Channel
(https://www.youtube.com/channel/UCi9in_tC9uTZa9Bo3HgnY1Q/featured)
- Funded data initiatives from Military Services
- Email me elizabeth.s.neipert@erdc.dren.mil

Open Forum

Pluses and Deltas

Wrap-up



DoD and the AKN: Who, What, Where, When , Why, and How

NMFWA Workshop, March 14, 2022 Spokane, WA

Michael Fitzgibbon and Sam Veloz, Point Blue Conservation Science
John Alexander, Klamath Bird Observatory
Elizabeth Neipert, US Army ERDC

Thank you for participating!

