State Wildlife Action Plans & Bat Conservation
Learning Series #11

Date: October 18, 2023   **Time**: 2:00pm-3:30pm (ET)

Meeting Link: https://fishwildlife-org.zoom.us/j/89335129468?pwd=7Wt4VBXZ8IZaVAPdabREQClq1FR2dL.1

Meeting ID: 893 3512 9468   **Passcode**: 700030

One tap mobile: +13017158592,,89335129468#,,,,*700030# US (Washington DC)

+13126266799,,89335129468#,,,,*700030# US (Chicago)

Overview: Bats in the United States are facing many threats including white-nose syndrome, mortality from wind turbines, habitat loss and climate change. Every existing State Wildlife Action Plan lists at least one bat species, and most plans cover more species with each revision. Many state agencies have limited resources to address and assess the many threats to our native bat populations and developing meaningful conservation strategies requires cross-border communication. There are many resources available to states that can assist with SWAP revisions. This session will cover existing conservation strategies that states can use as examples to develop their own future actions. It will also cover the resources available through the North American Bat Monitoring Program. Hub coordinators are ready and willing to help states' utilize the existing information available through the NA Bat data portal. Finally, we'll cover additional resources and provide reference information currently available for use by SWAP coordinators.

MEETING AGENDA

Time (ET)	Topic	Speakers
2:00 PM	Welcome and Introductions	Mark Humpert, AFWA Brett Andersen, Nebraska Game & Parks Commission
2:05 PM	Plenary Colorado Bat Conservation Plan Overview	Dan Neubaum and Jeremy Siemers, Csolorado Parks and Wildlife (20 min)
	North American Bat Hubs Overview	Beth Ward, Oregon State University (15 min)
	Using North American Bat data to inform SWAPs	Ben Neece, Southeast Bat Hub Coordinator, Clemson University (15 min)
	Additional Resources Identifying Threats and Conservation Actions to Inform SWAPs	Trina Morris, GA DNR (5 min)
3:00 PM	Breakout Groups	
3:20 PM	Reconvene	
3:30 PM	Wrap up and adjourn	

Welcome

-

Colorado Bat Conservation Plan Overview (Dan Neubaum and Jeremy Siemers, Colorado Parks and Wildlife)

- We have efforts preceding SWAPs going back about 20 years to create a CO bat conservation plan.
- Original plan started in 1996 with a meeting of Four Corners Bat Meeting. Led to loose group of biologists to develop a conservation plan for CO. In 1998, became the Western Bat Working Group, which works to cooperatively conserve bat species and their habitats. (Different names over the years.)
- Passes knowledge to others, including national-level.
- Colorado Bat Conservation Plan – 1st edition finished in 2003 to help guide funding and resources and provide bat expertise to managers. It wasn't directed by any one agency or initiated by any listings. It was intended to be a plan to help guide bat conservation, but didn't get formal sign-off from the agencies.
- Plan had multiple components addressing major threats and management issues such as mining, urban development, species rankings, consideration for bat roost protection, etc. Did not include some threats which were unknown at the time like WNS or energy development.
- CO Bat Matrix Tool – Developed a ranking as a guideline for managers and agency biologists to understand which species to be most concerned. Showed which species are most likely to be affected by different threats. Available online as a searchable database.
- Plan revised in 2018
    - Revisions considered WNS and wind development. Also included threats matrix.
    - Chapters have been updated, incorporating new science. For example, rock crevices are now known to be more important as habitats in winter and summer, so separated from caves.
    - Species accounts allows managers to better identify what species to focus on.
- Sought to make bat conservation actionable.
    - Provides background on how the topic of concern is used by bats or affects them, goals, objectives, management recommendations, and research needs.
    - For example, cave management practices identified inventorying caves for bat use and monitoring across seasons to better understand population dynamics. Research needs included identifying characteristics to evaluate potential use by bats, etc.
- Information now available online as a way to share tools with managers and the public.
- For the SWAP
    - CO SWAP last completed in 2015 and included four tier 1 and three tier 2 species. WNS and other issues have become more significant, so bat conservation likely to be emphasized more in the new CO SWAP.
- References:
    - CBWG: https://cnhp.colostate.edu/cbwg/
    - Colorado SWAP: https://cpw.state.co.us/aboutus/pages/statewildlifeactionplan.aspx
- Question
    - What legal protections are there in CO for bats?
        - Some language built into Chapter 10 that protects bats from harassment or being possessed. Public are encouraged to use humane exclusions but eviction or extermination are allowed if property damage is occurring.Does any model legislation exist by other SWAP managers?

- Rita Dixon – Noted Idaho Idaho's Rules Governing Classification and Protection of Wildlife https://adminrules.idaho.gov/rules/current/13/130106.pdf. In Idaho, all bats are legally protected and classified as "Protected Nongame Species"; however, this does not preclude unintentional take, protection of personal health or safety, property management (eg, eviction/exclusion), or public health concerns.
- Bats are protected in Arizona by ARS 17-102 (Wildlife as State Property), with no season. It isn't as straightforward as a law with direct language stating that bats may not be killed, however there is no open season, at no time may bats be legally killed and we widely share the information that it is never legal to kill bats, and they must be humanely evicted from structures. Rather than using a threat when talking with homeowners, we discuss how the only effective way to remove bats from a structure involves repairing the structure, therefore it should never be necessary to kill bats to solve the nuisance problem. Individuals who shot into a bridge and killed bats were prosecuted in the late 90s/early 2000s.
- Colorado is similar in that bats are a nongame species that are protected in that they can not be harassed or possessed but can be removed if causing property damage under our Chapter 10 regs: https://www.sos.state.co.us/CCR/GenerateRulePdf.do?ruleVersionId=2912

North American Bat Hubs Overview (Beth Ward, Oregon State University)

- https://www.nabatmonitoring.org/
- North American Bat Monitoring Program aims to improve data on bats, make data discoverable, and help improve species and trends info.
- Works to standardize protocols, a unifying sampling design, and integrate data analysis.
- Launched to help monitor bat populations. Also linked to establishment of WNS response.
- Bats are difficult to monitor, making it hard to understand issues such as migration routes, migration distances, why they approach turbines, etc.
- Uses a number of survey methods such as internal / external colony counts, acoustic surveys, capture records, etc.
- Follows status and trends.
- Data from NABat has been used to support research, such as scope and severity of WNS on hibernating bats. Also provides analytical support for listing of species.
- NABat also supports objectives at multiple scales. Small changes to local research can add up to significant support for national goals.
- It's a network of people, protocols and guidance to allow data to be compared, and a sample design that meet goals at multiple scales.
- The Network – Examples of activities
  - Regional hubs unite partners to meet different purposes such as meeting information needs.
  - Collaborative monitoring shared among partners.
  - Data is uploaded to a common portal.
  - Regional training
- Informing SWAPs
  - Monitoring and evaluation
  - Coordination and public participation

- o Plan review and revision
- Discussion
  - o How is the NW Bat Hub funded?
    - Funded through various agreements and contracts – all grant funded.
    - Idaho Department of Fish & Game has been able to provide some support to the NW Bat Hub using grant funds from the FWS WNS Grants to States program.
  - o Washington Department of Fish and Wildlife covers 24 NABat grid cells in summer and send data to Bat Hub - the support and analysis are really helpful!
  - o **Looking at the hubs map, there are 10 states in the interior US not included. Do the hubs only pertain to the states shown on the map for individual hubs? What about the rest of us?**
    - Great question, Eileen. There are some gaps in hub activity across the continent. I know that anyone can help get a hub started by reaching out to Bethany Straw with USGS bstraw@usgs.gov. Ben Neece might have some more input here as he just started the SE Hub about 1.5 years ago.

Using North American Bat data to inform SWAPs (Ben Neece, Southeast Bat Hub Coordinator, Clemson University)
- Partner portal is where project data is uploaded to a collective database. People can explore data and export it for their own use.
- Available through https://www.nabatmonitoring.org/. You can create an account.
- You can explore individual projects, including options such as visualizing data.
- You can also filter data for different regions, such as data for a specific state or county. You can also explore by multiple values.
- Reporting possible for different timeframes. (Function may not be working – Ben is checking.)
- You can also do more – download project data, personalize plots and analyses, and more.
  - o You can download and use raw data on your own PCs.
  - o The SE Bat Hub (https://sebathub.org) is working on scripts to automatically generate reports from data downloaded from the partner portal, so you can run them on your own and have consistent summary tables and plots.
- Reach out to the Hub with ideas for specific types of summaries and plots that would be most useful for SWAP revisions. The Hub has a user forum on the website to discuss these.
- Requesting an NABat Account: Starting here (https://sciencebase.usgs.gov/nabat/#/results), on top right click Request an Account. If not part of DOI (BisonConnect), the easiest is to click Login with login.gov. From there you can create an account. Otherwise you have to ask for a USGS sponsor and their email to create and use a ScienceBase account.
- If you need specific summaries and plots, let the team know. Talk to your regional coordinator and the central hub.
- bneece@clemson.edu

Additional Resources Identifying Threats and Conservation Actions to Inform SWAPs (Trina Morris, GA DNR)
- State of the Bats report now available. Available online, but publication with more info coming by next year. https://www.batcon.org/press/2023-north-american-state-of-the-bats-report/
  - o 52% of species need conservation action.
  - o Assessed different threats.
- Conservation Evidence Project - https://www.conservationevidence.com/
  - o Includes

- - Synopses of evidence
    - Database of summaries
    - What works in conservation
    - Open access journal
- Additional References
  - Conservation Evidence Website Link for Bats
    - https://www.conservationevidence.com/data/index/?synopsis_id%5b%5d=14
  - Bat Conservation Evidence Synopsis
    - https://www.conservationevidence.com/synopsis/pdf/32
  - State of the Bats Report 2023
    - https://digital.batcon.org/state-of-the-bats-report/2023-report/
  - Colorado Bat Conservation Plan
    - https://cnhp.colostate.edu/cbwg/wp-content/uploads/sites/13/2021/02/CBWG_BatConservationPlan_2ndEdition_2018__FullVersion.pdf

Breakout Groups Discussion Trigger Questions
- How are bats currently addressed in your State Wildlife Action Plan?
- Are you using the Regional Species of Greatest Conservation Need (RSGCN) list to inform/update bats listed in your SWAP?
- If you have a hub, how are working with the hub?
- What conservation actions do you plan to include in your SWAP?

Breakout Highlights
- Everybody had addressed bats in their SWAPs previously in one breakout group. Interest in working with the hubs to improve status of actions. Discussed the need to coordinate with the surrounding states.
- Common theme of making SWAPs more accessible to the public and partners. Using common classification system is important.
- Question – Does bat association with Halloween help or hurt conservation?
  - Seems to help – draws attention.
  - October also used for reptiles.
  - Temperatures can drop in the field in the Fall, which can be one downside if an outdoor event is held.

Breakout Group 1
- Rita Dixon Idaho-Idaho used Conservation Measures Partnerships for threat classification. We used higher level threats organizationally such as wind, mining, WNS.
- Our new SWAP is at a higher level with fewer actions. We will be stepping down actions and including more details in a work plan.
- We divided SGCN into SGCN and SGCN-information need. We used the latter designation for species where there is taxonomic, ecological, and distributional uncertainty.
- We did a cross walk of species and habitat. Instead of maps, we created a table of all species and divided state into ecoregions. This gives a quick glance
- to see where species are.
- Shannon Hilty-We will bolster conservation actions, make our SWAP more interactive, more applicable during revision.

- Angie McIntire-We used vulnerability criteria for 18 bat species and tiered as 1-3..New SWAP will be more useful to the public.
- Cathy Haffner-Our process is similar to others. We will be updating ranks and will have specific actions. We developed a COA tool with NatureServe which to make
- Our plan more interactive, a portal. The Northeast will be using a new classification system for conservation actions for consistency. We will step down into actions for application.
- Rita-I have looked at the CMP action classification, try to use it when I can, some are useful
- Cathy-This action classification system is from Quebec
- Cynthia Soria-The AZ SWAP is interactive and an explorable website.

Links to Video and Notes from Past SWAP Learning Series and Tentative Future Topics

Date*	Topic (w/Recording Link)	Recording Password	Link to Notes
Wednesday, November 16, 2022	#1 Engaging Tribes and Indigenous People in State Wildlife Action Plans	0T?41Gz.	SWAP & Tribal Engagement Notes
Wednesday, December 14, 2022	#2 SWAPs and Climate Adaptation Guidance	XU.=69*j	SWAP & Climate Adaptation Notes
Wednesday, January 18, 2023	#3 State Wildlife Action Plans and Renewable Energy	=7NSqgQT	SWAP & Renewable Energy Notes
Wednesday, March 15, 2023	#4 Interactive data and tools for SWAP planning and implementation	+6@f9jQW	SWAP & NatureServe Notes
Wednesday, April 19, 2023	#5 Engaging Diverse Partners & Making your SWAP More Relevant	$p?=!g95	SWAP & Engaging Diverse Partners Notes
Wednesday, May 17, 2023	#6 Using the SWAP & Landscape Conservation Framework for Interjurisdictional Landscape Conservation	B=Jg^@8=	SWAP & Landscape Conservation
Wednesday, June 21, 2023	#7 Making Your SWAP RAWA-Ready	FnJane%1	Making SWAP RAWA-Ready
Wednesday, July 19, 2023	#8 Incorporating corridors into your SWAP	2r#+^rIa	Incorporating Corridors into SWAP
Wednesday, August 16, 2023	#9 Roundtable Discussion	LtnZ1x$V	SWAP Open Discussion
Wednesday, September 20, 2023	# 10 SWAPs, Federal Planning, and the U.S. Fish and Wildlife Service	q1*b3vk3	

October 18, 2023	#11 Tentative Topic-Bat Conservation Guidance		
November 15, 2023	#12 Incorporating Fish & Wildlife Health and One Health into your SWAP		
December 13th, 2023 (2nd Wed of Dec.)	#13 Tentative Topic-2023 Round-up on Lessons Learned & Open Forum		
* Note all SWAP Learning Series sessions will be held from 2:00pm-3:30pm ET unless otherwise indicated.			