NABat Partner Portal Demo Worksheet

1. **Familiarize yourself with the NABatmonitoring.org website.**
    a. Go to: https://www.nabatmonitoring.org/
    b. Visit the various drop-down options in the main navigation bar to tour the site and available content.
    c. Visit the various pages under the Resources | NABat tab to become a registered NABat user and familiarize yourself with guidance related to project planning, data management, and data upload.
    d. For additional tasks/topics go to Quick Links to Resources | NABat
    e. Helpful introductory videos.
        i. Introduction to NABat | U.S. Geological Survey
        ii. Community of Practice Call: Understanding the NABat Master Sample | U.S. Geological Survey
        iii. Community of Practice Call: What's in a [Site] Name? | U.S. Geological Survey
        iv. The NABat R Package
    f. Direct links to valuable NABat guidance and status/trend products:
        i. A Plan for the North American Bat Monitoring Program – Loeb et al. 2015
        ii. Mobile Acoustic Transect Surveys SOP 1 – Locating and Establishing Mobile Transect Routes
        iii. Mobile Acoustic Transect Surveys SOP 2 – Field Season and Survey Preparation
        iv. Mobile Acoustic Transect Surveys SOP 3 – Conducting Mobile Transect Surveys
        v. North American Grid-Based Sampling Frame - ScienceBase-Catalog
        vi. See Appendix A for a Timeline of NABat Analytical Developments and a list of associated references.

2. **Explore the NABat Partner Portal – the user interface for the NABat database.** *Prior to starting the exercise, download sample data here.*

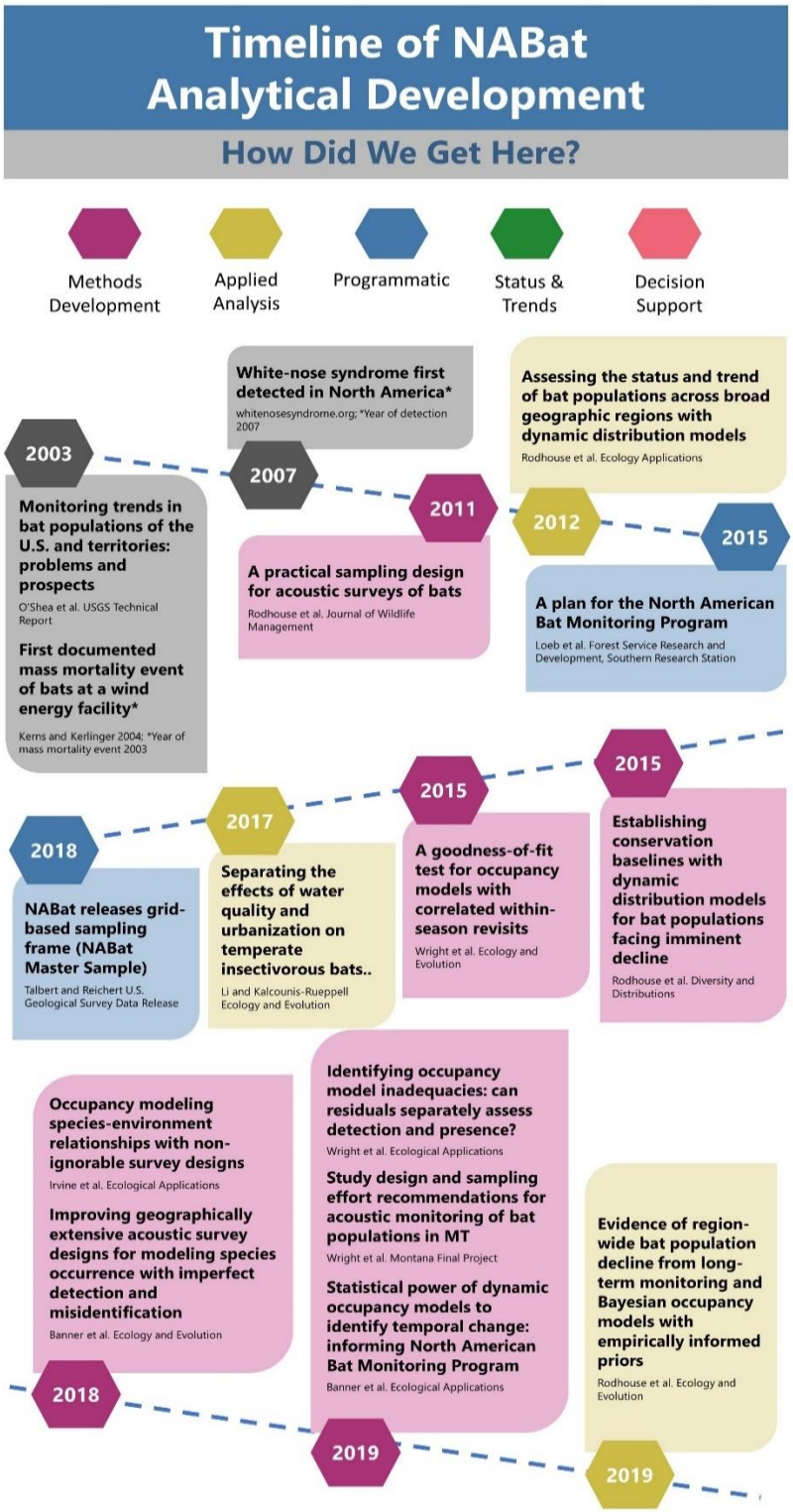
    You are encouraged to take detailed notes along the way documenting where you ran into roadblocks and what you would improve. This is intended to give you and our tech support and development teams insight into the user experience and functionality we are aiming to provide so you can ultimately help us make it better.

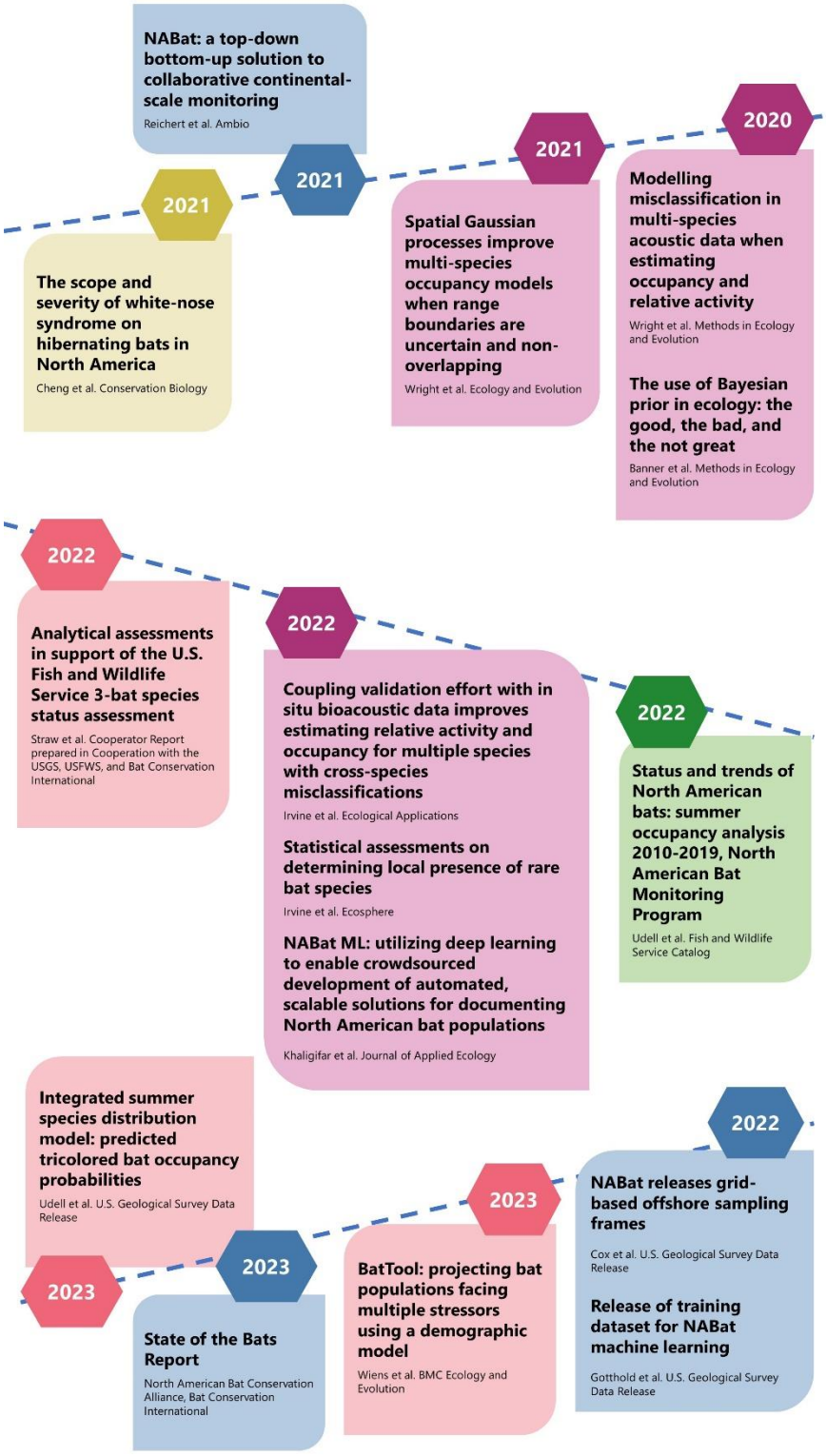
    Go to https://sciencebase.usgs.gov/nabat/#/explore to access the NABat Partner Portal. You can also click the linked "Partner Portal" box in the upper right corner of nabatmonitoring.org to access and begin tackling the following tasks...

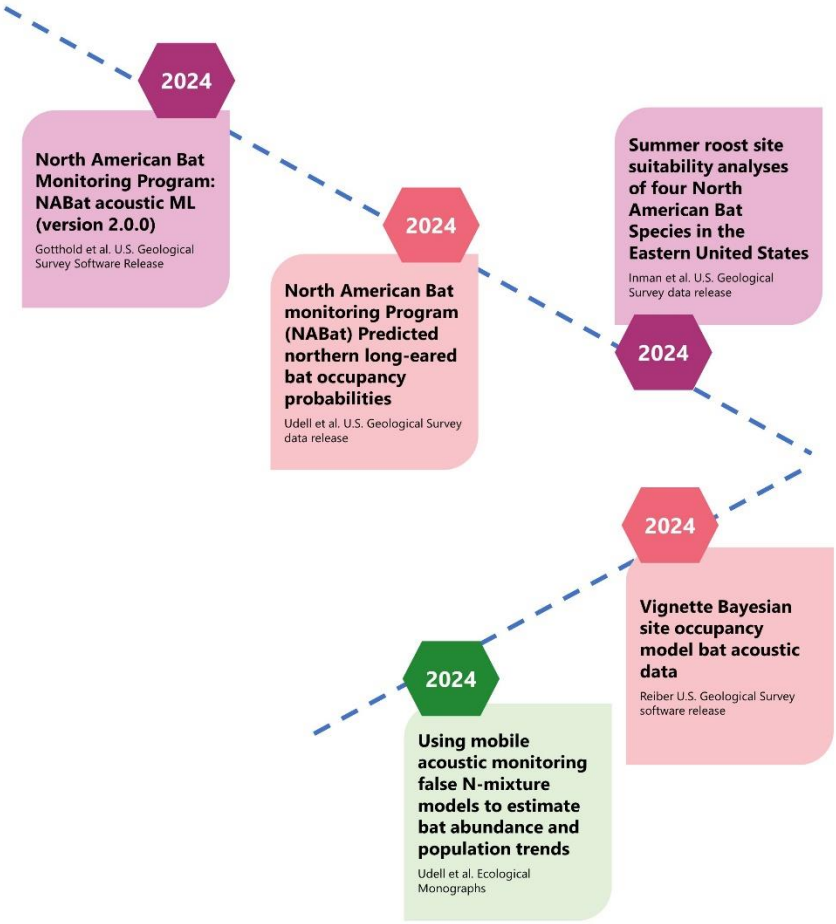
    a. Navigate through the available pages to find the total number of stationary acoustic records for all organizations to date.

b. Find the partner organization that has contributed the greatest number of capture records over time.
c. Follow this guidance to create a DRAFT project – check the draft project box at the top of the Data Wizard
    i. Create a Project Title
        ii. *Insert personalized name + NABat Training*
    iii. Add three members to your project – use two people who you are going to include in your project or add Haley Price and/or Frankie Tousley.
    iv. Review and select permissions for the Data Use and Sharing Agreement. How are these defined for your organization? Partners?
d. Proceed to cell selection to select cells for survey.
    i. Watch this training video on how to select cells for survey.
e. Follow this guidance to create a species list.
    i. Use the following naming format: *NABat Training List_Last Name*
b. Follow this guidance to create a stationary point and mobile transect.
    i. Create and save a point location for a stationary survey.
    ii. Create and save a mobile transect route.
    iii. Download the mobile transect that you created.
    iv. Upload the mobile transect route from the sample data provided.
f. Download the FULL bulk upload template for stationary point surveys here.
    i. Which metadata fields are required?
g. Upload a complete metadata (.csv) from the sample data provided to your draft project for one example data type (e.g., stationary, mobile, capture).
h. Download the error report – what errors were listed in the report?
    i. *Fix the errors and reupload/reprocess the metadata.csv*
    ii. *General themes of QA/QC errors*
    iii. *Pre-upload errors vs. post-upload errors*
i. Zip and upload acoustic (.wav) files from the sample data provided.
j. Upload site photos from the sample data provided.
k. " Book a tech support appt." (linked button found on main page of nabatmonitoring.org) to learn how to create a mock third-party data request and discuss follow-up questions for above list of tasks.

Appendix A- Timeline of North American Bat Monitoring Program Analytical Development




NABat: a top-down bottom-up solution to collaborative continental-scale monitoring
Reichert et al. Ambio
2021
2021
The scope and severity of white-nose syndrome on hibernating bats in North America
Cheng et al. Conservation Biology
2021
Spatial Gaussian processes improve multi-species occupancy models when range boundaries are uncertain and non-overlapping
Wright et al. Ecology and Evolution
2020
Modelling misclassification in multi-species acoustic data when estimating occupancy and relative activity
Wright et al. Methods in Ecology and Evolution
The use of Bayesian prior in ecology: the good, the bad, and the not great
Banner et al. Methods in Ecology and Evolution
2022
Analytical assessments in support of the U.S. Fish and Wildlife Service 3-bat species status assessment
Straw et al. Cooperator Report prepared in Cooperation with the USGS, USFWS, and Bat Conservation International
2022
Coupling validation effort with in situ bioacoustic data improves estimating relative activity and occupancy for multiple species with cross-species misclassifications
Irvine et al. Ecological Applications
Statistical assessments on determining local presence of rare bat species
Irvine et al. Ecosphere
NABat ML: utilizing deep learning to enable crowdsourced development of automated, scalable solutions for documenting North American bat populations
Khaligifar et al. Journal of Applied Ecology
2022
Status and trends of North American bats: summer occupancy analysis 2010-2019, North American Bat Monitoring Program
Udell et al. Fish and Wildlife Service Catalog
Integrated summer species distribution model: predicted tricolored bat occupancy probabilities
Udell et al. U.S. Geological Survey Data Release
2023
2023
State of the Bats Report
North American Bat Conservation Alliance, Bat Conservation International
2023
BatTool: projecting bat populations facing multiple stressors using a demographic model
Wiens et al. BMC Ecology and Evolution
2022
NABat releases grid-based offshore sampling frames
Cox et al. U.S. Geological Survey Data Release
Release of training dataset for NABat machine learning
Gotthold et al. U.S. Geological Survey Data Release



Appendix A Figure 1. Timeline of the analytical products to date that influenced the establishment of the North American Bat Monitoring Program (NABat), were produced by NABat, or inform NABat's efforts to understand where bats are in North America, in what numbers, and how populations are fairing through time. Also included are pivotal events that signify the discovery of two primary stressors for bats.

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