Information Management Region 9

**BCS NRM Wildlife Data Management Quick Guide (Draft)**

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**Background**

[NRM Wildlife](https://fsweb.nrm.fs.fed.us/support/docs.php?appname=wildlife) is an existing platform that was developed to efficient manage wildlife data. This application is well supported and provides the necessary data elements to model BCS buffers. Like all databases, NRM Wildlife relies upon active engagement in data entry, quality assurance, and maintenance which can also be refered to as data stewardship. NRM Wildlife is the recommended platform for managing bat data which can be used for BCS buffer modeling.

Bat data already exisits within NRM Wildlife, however most is not in a format that will facilitate buffering with the BCS buffer modeling tools. This quick guide will provide the intial steps to prepare local unit data for use in the BCS modeling process. Each unit will have to review current data, adjust some key attributes, and enter any data from this field season. The unit NRM Wildlife Data Steward will have to ensure all editors have the appropriate UMA roles and training. The BCS data team is available to help with unit support.

**NRM Wildlife BCS data preparation**

*Regional/Unit Taxa List* - The unit taxa steward should ensure the taxa list is updated/created and available for editors to use.

* Ensure that the unit has a taxa list for order that contains Chiroptera (Bats)
* Ensure that the unit has a taxa list for species and the following species are included and are entered exactly as listed below:
  + Northern Long-eared Bat - Myotis septentrionalis – MYSE
  + Little Brown Bat - Myotis lucifugus – MYLU
  + Tri-colored Bat - Perimyotis subflavus – PESU (This bat was formerly known as the Eastern Pipistrelle (Pipistrellus subflavus) and the unit steward should change all records refering to the Eastern Pipistrelle to Tri-colored Bat).
  + Indiana Bat - Myotis sodalis – MYSO

*Data Association* – The unit steward should ensure that all records are properly associated with a survey protocol. This will ensure the proper organzation of BCS specific data that faciltates efficient query operations in NRM Wildlife. Please refer to [this document](https://fsweb.nrm.fs.fed.us/support/go.php?id=676) for a more in-depth look at data organization in NRM Wildlife.

* Create a Survey with established protocol ([USFWS example](https://www.fws.gov/media/range-wide-indiana-bat-and-northern-long-eared-bat-survey-guidelines)) or use already established survey. Survey protocols should be specific to the type of observations being made (Hibernacula, Captures, and Roosts) and/or titled as such in order to easily manage data associations.
* Associate all sites with a survey, all visits with a site and all observations with a visit.

*Existing Data Editing* – As mentioned existing data will have to be checked to ensure the proper fields have been populated to model buffers for the BCS. Data entry templates have been provided to ensure all records contain the required elements.

* Ensure sites, visits, and observations are populated as per the linked data templates to represent a [hibernacula](https://usfs.box.com/s/hjo469fz0ejbpnsgthly29hzk4hqpl7c), [roost](https://usfs.box.com/s/no48a81x9i8mow8fpwbo1t9a3qr4ngg4) or [capture](https://usfs.box.com/s/k1yfo4ejqoj4kpja7xp3dilduv5hwtth) locations. Fill in all other elements as required.
  + Hibernacula key site fields
    - Scientific Name = Chiroptera
    - Common Name = Bats
    - Category = Biological
  + Hibernacula key visit fields
    - Biological Site Use = Hibernating
    - Local ID = InternalCount (Only if the count was done internally)
  + Hibernacula key observation fields
    - Scientific Name = Individual species (Do not use Chiroptera)
    - Common Name = Individual species (Do not use Bats)
    - ObservationMethod = Visual
    - Total Detected = (Total bats counted for a unique species related to the observation)
    - Activty = Hibernating
  + Roost key site fields
    - Scientific Name = Chiroptera
    - Common Name = Bats
    - Category = Biological
  + Roost key visit fields
    - Biological Site Use = Perch or Roost
  + Roost key observation fields
    - Scientific Name = Individual species (Do not use Chiroptera)
    - Common Name = Individual species (Do not use Bats)
    - Activity = Roosting
  + Capture key site fields
    - Scientific Name = Chiroptera
    - Common Name = Bats
    - Category = Administrative
    - Site Type = Sample Point
  + Capture key observation fields
    - Scientific Name = Individual species (Do not use Chiroptera)
    - Common Name = Individual species (Do not use Bats)
    - Observation Method = In Hand

*BCS Data Implemetation* – Data that is not already in NRM Wildlife will need to be entered. BCS data that was collected for the intial buffering may or may not be in NRM. These data should be loaded either manually or by bulk loading using the established [bulk data loader](https://fsweb.nrm.fs.fed.us/support/go.php?id=2603) supported by NRM Wildlife. Once loaded ensure there are no duplicates and follow the existing data editing instructions to ensure the data loaded meets the criteria to qualify for BCS buffering. The BCS Data team can assist along with the local unit staff.

*Future Data Collection* – Units are highly encouraged to use the [NRM Wildlife WAMo Survey 123 form](https://fsweb.nrm.fs.fed.us/support/go.php?id=2782) to collect bat data. It is acknowledged that the WAMo applications may not have all the elements required by unit staff as part of a survey. For this I recommend transfering the SITE\_CN number from NRM Wildlife to any local forms for tracking. Addtionally, it is crucial that site naming be standardized with a local tracking system in place. These measures may aid in the efficient management of data in NRM Wildlife and provide the additional data to meet the needs of units.