



National Data Processing Laboratory (NDPL)

2025 Mobile Transect Acoustic Checklist

Please review these common mistakes for mobile transect data:

1. Mobile survey issues:

- Confirm that your coordinates are embedded into the mobile transect recordings.
- Include all files created by the detector in the folder; do not leave out logfiles (.TXT) or shapefiles (.KML)
- We can sometimes use coordinates written to a gps.txt or .gpx file, so be sure to include these. We cannot pull coordinates from .KML files, but those need to be uploaded to your NABat project.
- Confirm that the time on your detector is correct.

2. Incorrect survey site names:

- Use the SAME site name as in previous years with identical spelling.
 - If you do not know what the name should be, check your NABat project or contact your Hub Coordinator for assistance.
- Ensure that the site name in your folder structure matches the site name used in your metadata.

3. Incorrect serial numbers:

- Ensure the serial number in the filenames within your location folder matches the serial number listed for that location in your metadata.

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BEFORE going into the field

- ☐ Add Bat Conservation International as a “Collaborating organization” in your NABat Project
- ☐ Detector Settings:
 - The file prefix for recordings should be set to the detector serial number.
 - Detector-specific settings can be found [here](#).
 - Ensure the detector time and date are correct.
 - Format the SD card using the detector.
- ☐ Plan for metadata collection –Survey123 or the [Excel metadata](#) sheet
 - *If using Survey123 for metadata:*
 - The Survey123 form for mobile acoustic surveys can be found [here](#) or via ← this QR code.
 - Ensure the form is downloaded to the Survey123 app on your field device prior to leaving the office.
 - *Excel metadata sheet:*
 - Print out a copy to take into the field.
 - Please be aware that if you don’t take the Excel spreadsheet to the field and you plan to copy the data from your Survey123 form, the data *may* disappear once you submit the Survey123 form.



WHILE in the field

- ☐ Update your time and location.
 - **Double-check that your time on the detector is correct** (this is a common mistake!)
 - **Ensure the recording device is paired with a GPS device to embed coordinates for each sound file recorded** (this is a common mistake!)
- ☐ Fill out the initial relevant metadata
 - Begin filling out the Survey123 form
 - Note: Submit the form only once your survey is complete and all fields have been entered and double-checked. You can save a Survey123 form as a draft within the app and return to edit it without submitting it.

RETURNING from the field

- ☐ If you used a paper/Excel metadata sheet, transfer all handwritten information to the digital Excel metadata document. You should have one row per detector or for each mobile survey transect.

○ **Required fields are:**

- **GRTS Cell ID:** If the transect passed through more than one cell, identify this transect based on the focal cell of the transect. The focal cell is usually the highest-priority cell. Use the GRTS ID and **not** the CONUS ID
- **Site Name:** This is the name of the mobile survey route. Each route should have its own unique name that is consistent from year to year, including spelling and capitalization. Do not use any spaces, but only letters, numbers, and underscores
- **Survey Start Time:** local date and time when the survey started
 - use the format MM/DD/YYYY HH:MM
- **Survey End Time:** local date and time when the survey ended
 - use the format MM/DD/YYYY HH:MM
- **Detector:** manufacturer and model, use the dropdown menu
- **Detector Serial Number**
- **Microphone type:** manufacturer and model, use the dropdown menu

☐ If you did not use the NDPL's Survey123 form to collect your metadata and draw your transect, you will also need to upload a .KML/geoJSON (saved as a line transect and not a point transect) that displays your mobile route. You can include a file previously submitted in past years, but a file needs to be included annually with the data submission.

☐ Save a backup copy of your raw data.

- There is always a risk of an external hard drive being lost or damaged in the mail.

☐ Organize your data/recordings.

- To successfully process mobile survey data that were collected following the protocol outlined by NABat, the recording files need to be organized in a particular way. If you did not collect data following the NABat protocol, please contact the NDPL for guidance for organizing your data.
- DO NOT send SD cards of data that are not organized into folders.

Folder naming structure:

GRTS_ID# (Root folder)

└─ **Mobile**

if you also collected stationary data in this cell, there should be a second folder named "Stationary"

└─ **Site(Route)_Name**

└─ **MMDDYYYY** (date of transect)

This folder is where all files created by the detector are stored.

- Acoustic recordings (.WAV or .ZC)
- log file (e.g., .TXT)*
- GPS log file (e.g., .TXT, .KML)
- Notes: - Do not have any subfolders past this folder.
 - WAV files can be in a "Data" folder within your Location folder if using a Wildlife Acoustics detector, or in their data folders if using a Titley detector.

☐ Send the following on an external hard drive to the address below:

- Recordings and log files organized in the file structure described on page 3
- Completed [metadata spreadsheet](#) (if not using Survey123)
- Completed & Printed Information Form (pg.5)

* Note: Please do not require a signature for the package to be delivered*

- ☐ Send an **email to rapid@batcon.org when you put your data in the mail.** Include:
- Name and contact information (email) of the preferred point of contact
 - Agency/organization name and region/forest/park/etc.
 - Regional species list(s) and/or considerations (if desired/applicable).

Send your Data to:

Conservation Metrics Inc.
UCSC Coastal Science Campus
145 McAllister Way
Santa Cruz, CA 95060 USA

****Do not send to the BCI address in Austin, Texas****



NABat Acoustic Data Information Form

Please print and include this form when mailing data to
the National Data Processing Lab



Sender's Name:

Email address:

Agency or Organization:

Region/ District/ Forest/
Park (as applicable):

NABat Project Name
and/or Project #: (if known)

Return mailing address:
(please no P.O. Boxes)

Primary contact info:
(if different from above)

Did you use Survey123?

☐ Yes

☐ No

Filename Prefixes

Below are examples of serial numbers from common sensors:

- **Wildlife Acoustics** detectors: S4U03473 (often start with S4U0 SMU0)
- **Pettersson**: 51896 (5-digit number often starting with 5)
- **Titley** detectors: 576087 (often a 6 digit number)
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Notes for specific detector models

Wildlife Acoustics

Song Meter Mini Bat

Prepare for a mobile transect: The new ultrasonic transect mode allows the Song Meter Mini Bat to be used for mobile transects. In this mode, the Song Meter Mini Bat uses the paired mobile device's GPS location to embed an accurate location into each WAV file and to log the recorder's path to a .KML file.

1. Pair the Song Meter Mini Bat with the Configurator app
2. Tap the Configure icon to open the Paired Configuration Editor screen.
3. Check the recording schedule to make sure a schedule block is currently set to record.
Note: If the current schedule is not set to record, Transect Mode will not record any audio files. A .KML file will be created, but it will not contain any recording references. Always check to be sure the Song Meter Mini Bat is currently running an active record schedule before entering Transect Mode.
4. Tap the Transect arrow to enter the Transect screen.

Setting Filename Prefix

1. The default "Recorder Name" is the Serial Number
2. If it needs to be changed: PAIR>Configure>
3. Edit Recorder Name

Song Meter SM4 BAT FS

This detector requires the additional GPS Option Accessory for mobile transects.

Titley Scientific

Anabat SWIFT

Prepare for a mobile transect

1. Press the yellow Settings button (gear icon), then press **Other**
2. Tap **Transect**, then **On** (selected option will be yellow)
3. Set the Time Zone: BEFORE starting recording **Settings>Other>Time Zone**
4. Record using Full Spectrum: **Settings>Recording>FS/ZC**, select **FS** (in yellow when selected)

Setting Filename Prefix

1. Turn on the detector and press the yellow Settings button (gear icon) in the bottom right corner of the screen.
2. Select the '**Recording**' menu.
3. Scroll through the first two 'Recording' menu pages until you reach 3/3.
4. Select '**Filename Prefix**' and ensure it is set to '**On**.'

Chorus & Ranger

1. Choose to use the recorder serial number as a filename prefix in the Recording Settings menu or in the SD Card menu. To change the prefix, use the up/down arrow buttons to select File Prefix, then use the left/right arrow buttons to choose Serial #.