

WORKFLOW: POST-PROCESSING ACOUSTIC SURVEYS FOR USF&WS COMPLIANCE USING SONOBAT30

This workflow provides users with a “quick-start guide” to using **SonoBat30**, the **SonoBat-Data Wizard**, and **MS Excel** to post-process acoustic survey data and manually vet results for compliance surveys designed to identify probable presence of threatened and endangered species in North America.

You will need . . .



Data Wizard



SonoBat30



MS Excel

DataWizard: Attribute Files (make copies of WAVs)

- Rename & Attribute to Output Folder (e.g., a folder named for the entire Project)
- Create location-site prefix w/Fixed Prefix Wizard
- Append a File Note* to Each WAV File

***NOTE:** A “File Note” is different from “Suggested Metadata.” The File Note appears in a WAV file viewer (either SonoBat or KaPRO) with every WAV file that is opened so users can see at a glance where, when, why, and how a recording was made. “Suggested Metadata” is encoded in the WAV file and can be extracted in the Vetting Table for export to a file-level output. Both are helpful, but create a File Note first (using Notepad (PC) or Text Edit (Mac)), and then, if desired, copy and paste File Note Contents into the Suggested Metadata pane.



Repeat for each detector off-load (per detector), per site, for entire project. (No need to make separate site folders.)

DataWizard: Batch File Scrubber

- Select: Thorough Scan
- Select: Auto-filter
- Select: High grade

DataWizard: Batch Classification

- Select Proper Classifier and Region†
- Keep Default Analysis Settings
- Decide to Modify Filename or Not

SonoBat30: SonoVet - Calculate MLE

- Add to Project Project folder (Output Folder; 1st DataWizard step)
- Select “Export” Tab and in “use current layout” drop-down menu, select “Night-site Summary”
- Consider editing output file name to include Project Name
- Select “Save to File”

Excel: View MLE Results for Species of Interest

- Open SonoBat ***ProjectSummary.txt** File
- Evaluate MLE Values for Species of Interest
- Highlight Nites at Sites to Manually Vet

§NOTE: A vetting table layout can be saved and re-loaded for future projects, eliminating the need to add metadata columns. This also standardizes all File-level outputs. After editing a Vetting Table go to the Export Tab and “Save Layout” naming and filing it for easy future use.

SonoBat30: SonoVet - Manually Vet —> Add to Project

- Select “Vetting Table” Tab
- Right-click “ManID” Column —> Insert before —> GUANO Metadata —> SB|Location (repeat for SB|SiteCode)[§] (see note)
- Right-click on “SppAccp” Column
- Select “Create Complex Sort”
- Select “+” to add the following values, in this order: Monitoring Night, SB|Location, SB|SiteCode, SppAccp, #Accp (sort Z-A), #Maj (sort Z-A) then select Accept

SonoBat30: Viewer - Manually Vet —> Configure ManID

- Select “Config” from Right-hand side of viewer pane
- Customize Defaults and Add Custom Buttons as needed
- Select “Save”
- Invoke Buttons by selecting “ManID” then tile Buttons, Viewer, and Vetting Table windows so all are visible

SonoBat30: SonoVet - Manually Vet —> Add Manual IDs

- Select “Vetting Table” Tab
- Scroll thru SppAccp which are now sorted by nite-site and confidence and make ManID decisions with buttons
- When finished Select “Export” Tab and Select “Use Current Layout” from drop-down menu
- Consider editing output file name to append “vetted”
- Select “Save to File”

Excel: Summarize File-level Export for Analysis and Reporting

- Open SonoBat ***vetted.txt** File
- Create Filters, Sorts, Pivot Tables, Charts and Graphs