



Indiana Bat, FW3 <indiana_bat@fws.gov>

comments on software testing criteria (UNCLASSIFIED)

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Classification: UNCLASSIFIED

Caveats: NONE

Attached are my comments for the draft Software Testing criteria.

Thanks,

Eric Britzke

Classification: UNCLASSIFIED

Caveats: NONE



Britzke Comments on Acoustic Bat Identification Software Testing Criteria 20130308.docx

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Comments on Acoustic Bat Identification Software Testing Criteria – Draft January 2013

In general I think the criteria laid out in this document are well reasoned and provide a framework for assessing the suitability of software for application with this protocol. However there are a couple of issues that I think should be reconsidered.

1. In criteria #2, I am unsure about the statement of “program developers must provide the Service with a copy of their call library.” Is this statement meant to include the raw data files that were collected and used in the identification program development? Why would the FWS need this? I can see having a summary of the input call library (# of files, location, etc.), but submitting the raw data files is unnecessary.
2. In criteria #3, the statement concerning the geographic area that is covered by the program needs clarification. Simple maps are not very informative as species boundaries don’t conform to political boundaries. Having an explicit species list is obviously necessary and this should provide all of the information a knowledgeable bat researcher would need to pick the right species set regardless of the presence of a general map.
3. In criteria #4 it states that “medium quality passes that are recognizable to genus.” In my experience with acoustic identification calls are either of sufficient quality to permit identification and they can be identified to species or they lack the quality necessary for any identification past H/L frequency echolocators. Grouping of species is wrought with issues that would that would impact this process in numerous ways.
4. In criteria #6 it states that qualitative assessment should be done for accuracy rate determination. This should be quantitative instead of qualitative. Additionally, it states that cross-validation is a minimum acceptable accuracy rates for all *Myotis* is set at 90%. What is the justification for selection of this threshold? With the use of maximum likelihood estimator to determine presence, a strict threshold at a high accuracy rates seems unnecessary. As there is relationship between call quality and accuracy rates, is the test set only the highest quality of files or it is realistic of the results of recording under circumstances set forth in the survey guidance? Setting the bar artificially high will serve to eliminate potentially useful programs from this process when the end determination of presence/absence would be the same.

Thanks for the opportunity to comment on the software testing criteria. If you have any questions or need further clarification feel free to contact me.

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