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Document Name	Page #	Comment
Contingency Plan	1	Suitable habitat should be defined in coordination with the local field office rather than by a range-wide
Contingency Plan	1	In Step 3B, it might make sense to say "assume potential presence of Indiana bats"
Contingency Plan	1	In Step 4B, a more defensible approach would be to require consensus on Indiana bat presence from 2
Contingency Plan	1	For Step 5, which netting protocols are to be followed? Suggest allowing surveyors to follow historic
Contingency Plan	1	In Step 6, rather than referring folks to Phase 4 in the draft guidelines, why not follow historic protocols
Draft...Guidelines.Jan2013	3	I do not agree with using a rangewide definition for suitable habitat. I believe the definition will vary with forest density and forest type. Thus, determination of suitability should be done in coordination
Draft...Guidelines.Jan2013	5	Consider extending the monitoring season to start earlier than 15 May or to end later than 15 August. With bats being impacted by WNS and with climate change, it is probable that there will be shifts in
Draft...Guidelines.Jan2013	10	It is not clear where or how many habitat assessments should be done in the project area. I would suggest either assigning the number of plots to be done based on forest cover and other factors.
Draft...Guidelines.Jan2013	10	What is the size on the sample sites for habitat assessments? Is this a plot or a transect? Size is important if you are to obtain a measure of density of snags or other types of potentially suitable roost
Draft...Guidelines.Jan2013	10	Important variables that should be considered on this datasheet are tree composition/diversity, stand age, basal area, stem density, and size of forest patches.
Draft...Guidelines.Jan2013	11	I suggest trying to follow these guidelines before requiring them of others. I believe it will be difficult to meet these criteria for detector placement when conducting passive surveys. For example, it might be necessary to leave a detector in the middle of a road in order to get it away from the edge but also have
Draft...Guidelines.Jan2013	11	Chris Corben and I discussed sampling roads; he suggests pointing the mic across the road at an angle, which would allow a detector to be placed at the edge rather than in the center of the road. We will be
Draft...Guidelines.Jan2013	12	Because of the potential for obfuscation by folks sending in calls recorded elsewhere, I think you should require x, y coordinates in the files if the equipment allows for it. Once this is required, detector
Draft...Guidelines.Jan2013	12	The Anabat unit will generate a status file to show that it turned on/off during each night of the survey. I
Draft...Guidelines.Jan2013	12	In areas heavily affected by WNS, is it always possible to record at least 10 files per night?
Draft...Guidelines.Jan2013	13	Best detector, or rather microphone, orientation will depend on the height at which the mic is set. It is important to assess the volume and area of most sensitivity within the zone of detection around the
Draft...Guidelines.Jan2013	13	Accounting for weather may be difficult in remote areas (e.g., NC/TN mountains) if weather stations are far away, though I realize this is not the case where there is more human development.
Draft...Guidelines.Jan2013	14	Were detection probability assessments conducted with an unapproved version of acoustic software? If so, these estimates of needed baseline effort may not be accurate.

Draft...Guidelines.Jan2013	14	Prior to requiring any particular software or combinations of software, I think you should conduct an experiment to assess the effectiveness of the software for detecting Indiana bat calls in areas where the species is known/not known. The experimental data presented by Stantec at the SBDN meeting was a
Draft...Guidelines.Jan2013	14	There is no evidence that any beta software is valid for identifying gray bat calls. Indeed, most trial runs I've seen indicate that autoclassifiers are generally bad with gray bats because PESU feeding frenzy calls
Draft...Guidelines.Jan2013	15	In order for a surveyor to provide such a detailed report within 2 days of recordings, the autoclassifier software will have to spit out the results in terms of number of calls detected and species composition. It may be very difficult for a surveyor to prepare such a detailed report without help from the software.
Draft...Guidelines.Jan2013	17	Can you define "mist-net set-ups" somewhere?
Draft...Guidelines.Jan2013	17	Isn't it ok for a biologist to have a technician checking mist-net set-ups at a site, as long as the biologist is present at the site? The wording under Personnel makes it sound like this is not allowed.
Draft...Guidelines.Jan2013	18	For point 3, I think you should make recommendations by net sites, not net nights. This terminology just gets confusing. I could do 10 net nights at one site by putting up 5 double high net sets for one night. Is this what you want or do you always want a site surveyed at least 2 times? Sampling a site twice
Draft...Guidelines.Jan2013	18	When determining number and placement of acoustic sites, I think you should consider the amount of potentially suitable habitat across the entire project area. With 1 acoustic detection in a small project area with little suitable habitat I think a lower amount of mist netting effort will be required than in a
Draft...Guidelines.Jan2013	21	Why are you not recommending a minimum spacing between nets? I would suggest at least 30 m between double high or triple high sets, but a surveyor could deploy a single high closer to a
Draft...Guidelines.Jan2013	21	What is the justification for the longer (6 hour) survey period? There are severe diminishing returns on this level of effort as bat activity declines markedly after 2 am (or midnight, really) in most areas. When I am netting, I will not shut down til I have gone at least 15 min without a bat after whatever time I had designated as the end time (e.g., will stop at 2 only if not bats caught at 1:45 net check). Could an
Draft...Guidelines.Jan2013	22	When you recommend additional mist-netting, do you mean a new night or additional effort that same
Draft...Guidelines.Jan2013	22	If it is below 50 degrees for <half the night, you don't have to do additional netting?
Draft...Guidelines.Jan2013	22	The photo documentation requirement will be very difficult to meet at a busy site when multiple Indiana bats are captured (as they cannot be held for >30 minutes on my permit).
Draft...Guidelines.Jan2013	23	Presently, the best WNS index to use is the Acta Chiropterologica article from Reichard. I verified this via
Draft...Guidelines.Jan2013	25	I don't think testes descended is the best term for the datasheet. Most bat biologists use scrotal instead.
Draft...Guidelines.Jan2013	27	Are you suggesting a surveyor should transmitter every Indiana bat captured at a site (except perhaps adult males)? It may not be feasible to track >3 Indiana bats in some areas, so this could be a wasted
Draft...Guidelines.Jan2013	27	The transmitter requirement seems to be a bit onerous, as one biologist might need to have >100 transmitters on hand. I think this requirement needs some more thought.

Draft...Guidelines.Jan2013	27	Are you going to make recommendations on type of adhesive? Non-toxic should be a requirement, but even with the colostomy glues some work much better than others. How to attach transmitters is also
Draft...Guidelines.Jan2013	27	The attachment technique is very important, as this dictates the amount of data the transmitter will yield (if improperly attached, the transmitter may fall off quickly). I suggest referring to the protocol that Tim Carter has put together ( <a href="http://tccarter.iweb.bsu.edu/Application%20of%20transmitters%20in%20small%20insectivorous%20ba">http://tccarter.iweb.bsu.edu/Application%20of%20transmitters%20in%20small%20insectivorous%20ba</a> )
Draft...Guidelines.Jan2013	27	Rather than making guesses on allowable transmitter size, why not come up with a number? For adults, use only 0.42 grams or lighter (as long as the bat is >7 grams) and for juveniles, use 0.36 grams or lighter (as long as the bat is >5.4 grams). Or something like that based on weights for transmitters available in
Draft...Guidelines.Jan2013	27	Because Indiana bats are capable of long distance movements during summer (e.g., we documented a movement of 24 km in 4 days by a pregnant/lactating Indiana bat in June 2011), I think it is necessary to track the bat for the life of the transmitter in order to best understand how it is using the project area. A
Draft...Guidelines.Jan2013	28	When determining what data will be required for radio telemetry (and other aspects of the guidelines), I suggest coordinating with USGS to see which fields will be in their bat population database. I know they
Draft...Guidelines.Jan2013	30	The roost datasheet should include info on the bat tracked to the roost so that these data do not get lost. I suggest recording bat sex, age, reprod condn and band number on each roost datasheet.
Draft...Guidelines.Jan2013	30	As noted in my comments last year, with this datasheet all dead roosts will be classified as type 3 or 4. Categories 5-9 are worthless as none have bark and most Indiana bat colonies are found under bark. I
Draft...Guidelines.Jan2013	31	A roost datasheet should document number of snags in the surrounding area.
Draft...Guidelines.Jan2013	31	Data collected at a roost should be comparable to data collected to identify/quantify available habitat
Draft...Guidelines.Jan2013	32	I feel it is excessive to require a qualified biologist for roost emergence counts. With this requirement, it will be very difficult to complete the required surveys of roosts found under this protocol. I suggest surveying Indiana bat biologists to find out how many emergence counts they do in summer. I suspect not too many, as they also have to be at net sites and emergence counts can be done by any diligent
Draft...Guidelines.Jan2013	32	Emergence counts will be more effective when >1 person is present, as the emergence points are not always predictable or visible from every point around a tree.
Draft...Guidelines.Jan2013	33	Suggest requiring the use of acoustics during emergence counts at hazard trees that are to be
Draft...Guidelines.Jan2013	33	I suggest 2 nights of emergence counts to confirm that the tree is not in use as bats do not always
Draft...Guidelines.Jan2013	35	As with the roost tree datasheet, the emergence datasheet should also contain info on type of bat
Draft...Guidelines.Jan2013	35	Roost # should be required (not optional "and/or bat #)
Draft...Guidelines.Jan2013	35	As noted in my comments last year, by recording bats at 2 minute intervals, surveyors are more likely to miss some of the bats emerging from the roost. Are you going to analyze bat emergence data to 2 min



