

Protocol/Notes for recording vocalizations on Cayo Santiago  
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Although the recording equipment may vary from season to season, the following represent some general issues to keep in mind while you are recording vocalizations from rhesus on Cayo Santiago.

Before coming to record vocalizations, you should check out all components of your recording system, and should make sure you have backups. Thus, make sure that the microphone has been calibrated with our lab microphone; make sure the battery light in the microphone goes on; check the cable running from the mic to the tape recorder; check the VU meter on the tape deck to make sure that the signal is coming in and that the record level is set properly (avoiding peaking). You should never record while holding the microphone directly. You should either use a shotgun made by Sennheiser or a clip that can be held so that you don't transmit vibrations to the mic.

Once your equipment checks out, you are ready to record. Recording conditions vary considerably on Cayo. In places that are open, you will most likely be facing a pretty good wind, and this may cut out the quality of the recordings; the same happens when you are near the shore, as the rolling surf provides a significant masker. Check your VU meters. If they are rising and falling near peaks, chances are that you will not be able to record vocalizations with high signal:noise ratios. You will have to move to a different location. On the other hand, if there is something exciting going on that may elicit calls from subjects that have yet to be recorded, or relatively rare vocalizations, it may be worthwhile recording; the quality may not be good enough for playbacks, but may be sufficient for extracting some acoustical features. The windscreen will help, but will not eliminate noise. Another way to influence S:N is to position yourself in such a way that the wind doesn't strike head on with the mic. The closer you are to the subject, the better it is; but there is a tradeoff as some animals will move away if you get too close. If you approach animals and watch their behavior (e.g., scratching, threatening, yawning, backing off), you can judge how comfortable they are with your distance.

When you are recording, it is very important to note as much information about the caller and context as possible, as well as time of day. Thus, for every call you record, the recording is only useful if you have a clear and unambiguous identification of the caller, and some sense of what caused the call such as who it was directed toward, what elicited it, and so on.

As you are recording, you should zero the counter after you have recorded a call and described the caller and context. If the counter reaches approximately 20 and you haven't recorded a call that is of high enough quality and identified for caller and context, then hit stop and rewind to zero. This will save on tape and will also provide you with a tape that consists largely of high quality calls that have been identified.

After filling up a tape, it is good to transcribe the tape. I like to set up a checksheet that looks like this:

Tape Recorder: (fill in the kind of deck used); Microphone: (fill in the kind of mic used); Date: \_\_\_\_\_ Tape side: \_\_\_\_\_ Place of recordings: \_\_\_\_\_  
Person recording: \_\_\_\_\_

| Counter Number | Caller | Call Type | Context | Quality | File |
|----------------|--------|-----------|---------|---------|------|
|----------------|--------|-----------|---------|---------|------|

Counter number: is the counter on the deck; when you start a tape, wind forward by hand the tape until the white leader just crosses the recording area on the deck and then hit zero. Then, when you start transcribing, do the same. This will give all tapes a consistent zero point

Caller: Caller ID

Call type: using the nomenclature that I have developed (or some other if you are recording another species), enter the call type

Context: describe why the call was given, and to what. For example, if an animal gives a "noisy scream" I might write that it was given in response to alpha male A74 biting the caller, and then A74 runs off, leaving the focal behind.

Quality: Fair, Good, Excellent. Basically, Fair recordings are barely useable, possible to extract temporal information. Good recordings are sufficient for acoustic analyses, but most likely not good enough for playbacks. Excellent recordings are clean, with high S:N, not acoustic interference from other callers or background noise.

File: leave this space so that if you digitize the signal onto RTSD or some other package, you can assign a file name and match these up later.