

Protocol for Observing Foraging Lucy's Warbler – Version 1

The goal of this project is to gather information on the habits of Lucy's Warblers as they hunt for tiny insects while flitting around the canopy of trees.

The goal is to record foraging effort and foraging site preferences for 5 minutes for each bird (but in whole tree increments) i.e. track with it as long as possible, across multiple trees up to 5 minutes. Stick with it in whatever tree it was in before the 5 min mark until it leaves that tree.

Note: It is VERY useful to do this with a stop watch or app on your phone that has a "laps" feature. This way you can just make it a "lap" each time the Lucy's Warbler goes to a different tree. Then when you are done all the different time increments are saved for you to enter into the datasheet along with the type of tree that corresponds to the amount of time the bird was foraging there.

Note: The Sample Datasheet is very helpful in understanding the protocol. It is also available on the www.aziba.org webpage about Lucy's Warblers.

1. Find a Lucy's Warbler and start stopwatch or
 - a. Under "individual, write your initial and the number of the bird (use leading zeros)
 - i. E.g. JLH-01
 - b. Under "Start time" write "0" for start
 - c. Note what type of tree it's in and make a check under "velvet mesquite" "non-native mesquite" "hybrid" or "other"
 - i. If "other" record the species (or photo or bring a sample back for ID)
 - ii. If mesquite but unknown, bring a sample back for ID w/ a unique number tagged to the comments on the datasheet – a few leaves/end of a twig
 - d. While the bird remains in the same tree, make a tick-mark under the 'foraging effort' column for each time it pecks at something in the tree (we're going to presume that each peck is getting a tiny insect).
 - e. Note in "comments" if there are any obvious types of insects taken
 - f. Under "Stop time" note time up from 0 at which the individual leaves the tree
 - i. E.g. if it's been foraging from start to 3minutes 25 seconds write "3m25s"
2. If the total time is less than 5m, continue tracking the individual as it flies to a new tree
 - a. Under individual keep the same individual number as above.
 - b. Under start time write time it enters tree (up from 0)
 - i. E.g. if you've been tracking it for 3m25s and it took 2s to fly to a new tree, the start time is 3m27s
 - c. Mark the type of tree it flew in to (1.b.i/ii)
 - d. Mark the foraging effort tickmarks (as in 1.c.)
 - e. Note comments
 - f. Under "stop time" note time up from 0 that it left the tree.
 - i. E.g. if it left the tree at 8minutes 7seconds from when you started the clock, mark "8m07s" –and you're done.
 - ii. E.g. if it left the tree at 4minutes 55 seconds, mark "4m55s" – and if it gets to a new tree before 5m0s, start again at 2.
3. If the individual gets to a new tree before 5 minutes has elapsed, start protocol again at 2. OR if 5 min has elapsed before it gets to the next tree, move on to the next individual (be sure to mark the next one as a new individual).

Note: Here is a guide to the Dot/Line tally system used on the sample datasheet – it can be much faster and takes up less room:

One key advantage to this is if you saw a bird peck with in a tree 30 times you can just quickly add three Xs

Dot Tally System

