

Dummy Nest Protocol

Texas Quail Index

Summary: Observers will establish 36 “dummy nests” and monitor their fate weekly for four consecutive weeks. A count of potential nesting sites will be correlated to nest survival.

Schedule: Dummy nests should be established in mid- to late-May, and then checked every 7 days for 28 days (4 weeks). (*Note: check your calendar for the four weekly checks to ensure that someone will be able to check the nests on schedule.*)

Objective: To establish six transects of “dummy nests” (a total of 36 nests) to assess quantity of nesting habitat. Your technique must be such that those present at the field day can walk to the nest that you placed 15 days ago, i.e., be sure and include enough detail on your data sheet that a complete stranger can walk to the nest.

Materials:

Chicken eggs (minimum of 9 dozen [10 recommended]); “medium” size preferred
Latex rubber gloves to be worn by individual handling eggs (to minimize human scent)
Flagging tape
Sharpie permanent markers (black ink)
Flat metal washers (1 inch diameter; at least 36)
“Playmate”-like cooler to carry eggs in field
Data sheet
Clipboard and pencil
Camera and color print film (at least 36 exposures)
Enamel board and marker (optional)

Description of dummy nest: A dummy nest consists of 3 chicken eggs situated in a habitat that mimics what a wild quail would select. These sites are typically located in either (a) a bunchgrass about the diameter of a basketball (e.g., little bluestem) or (b) a clump of pricklypear about the size of a No. 2 washtub. The ideal situation occurs where a mixture of grass and pricklypear occurs; in that case, we put odd-numbered nests in bunchgrass, and even-numbered nests in pricklypear (e.g., Nest No. 2 would be placed in prickly pear). This allows participants to examine cover value of the two nesting substrates.

Procedure:

1. Randomly select 6 separate mile markers on your transect. Cut up numbered pieces of paper and select 6 of them. These will be used throughout this portion of the demonstration (i.e., for the 5-year period).
2. Each transect will consist of 6 nests located at roughly 50-yard intervals. There will be a total of 36 nests established (i.e., 6 lines of 6 nests each).
3. Wear latex gloves at all times while handling eggs to minimize human scent.

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4. Place at least 36 eggs (suggested that you carry a couple of extra in case of breakage) into the cooler; enough washers for 1 per nest, flagging tape and Sharpie marker. If the eggs are in foam containers, cut the top off and place 3 boxes stacked on top of one another into your cooler for easy transport in the field. One member of the pair should carry flagging tape, washers, marker and eggs, while the other carries a clipboard with data sheets.
5. Select an object on the horizon to serve as a focal point that is roughly perpendicular to the road. Use that object as your heading. Alternatively, you could use a compass or GPS unit to establish a heading.
6. Step off 50 yards to locate Nest #1. Use the marker to write "T1, N1" (Transect 1, Nest 1) on a strip of flagging tape (use about 12-15 inches of flagging tape). Tie this flagging to the nearest shrub so that it will be visible from the mile marker. If the pasture is grazed by cattle, tie the flag at a height that will prevent cattle from eating it or pulling it out of the shrub/tree.
7. Once the shrub is marked, take 10 steps to the left and locate what you consider to be the nearest suitable bunchgrass for a nesting site (see descriptions under dummy nest section above). This may be at the toe of your boot, or you may have to walk >50 yards. Using the toe of your boot, wallow out an area in the bunchgrass about the size of grapefruit. Now place a metal washer in the bottom of the nest "bowl", and then carefully place 3 eggs in the bowl. Cover the grass back over the nest as appropriate. The nest should still be visible, but mostly camouflaged.
8. On a direct line, pace back to the flag for this nest. Relay the information, e.g., "13 steps Southwest of flag in little bluestem" and have your partner record the information in the appropriate place for Nest 1. Again, be specific and detailed with your records. If there are many little bluestem plants, your record might say "13 steps SW in little bluestem just west of yucca plant". If it's cloudy, either take a compass or be sure of your directions (we've had directions off by 150 degrees or more because the person was disoriented).
9. Take a photograph of the nest location; you'll need to either have your partner in the photo with a clipboard and paper that says the county name and "T1, N4", or use an enamel board. (Get double prints when you have developed; send 1 copy of prints to D. Rollins.
10. Return to the flag, find your heading, and walk another 50 yards to locate Nest 2. Use same methods for identifying this nest (T1, N2).
11. Take 10 steps to the right of the line and locate the nearest suitable prickly pear (if the

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site offers 2 nesting substrates). Place the nest carefully toward the center of the pear, being sure to place a washer under the eggs. You may not need to wallow out a place in the cactus to place the eggs; in case you do, of course wear leather boots to protect yourself. If prickly pear is unavailable, choose what you think might be used by quail, e.g., sacahuista, catclaw, etc.

12. Repeat these steps until all 6 nests have been situated. Remember to alternate directions from the transect line for each nests (and every other nest located in grass/pricklypear if the site permits this comparison).

13. Periodically, have the recorder try and locate a nest (e.g., No. 6) from the clues that you provided. If he/she cannot find the nest(s), your notes were insufficient. Correct them now to avoid confusion a week or two from now.

14. When all nests on a transect have been established, it's time to estimate the number of potential nesting sites along the transect. To do this, have someone about six feet tall (i.e., has an arm span of about six feet) walk directly from flag to flag on the return to the truck. As he walks this line, he holds his arms outstretched and counts all suitable nesting sites that are rooted within his arm's span. The recorder should follow close by and keep a running tab of "tick marks" for two categories: "grass" and "pear". When you get back to your starting point, you should have walked about 300 yards. The "belt transect" you've surveyed is about 1/8 of an acre.

15. Once you have completed all the transects, make (at least 2) photocopies of your 6 data sheets and place them somewhere where you can find them next week. Leave one set of the sheets with the cooperator.

16. Use local expertise (e.g., Bobwhite Brigade cadets) to help establish the transects. They've got some experience and it will be a good project for them. If you need help in locating Bobwhite Brigade cadets from your vicinity, let Dale Rollins know and he will supply names of cadets in your area.

17. Check transects at 7-day intervals. If any eggs are missing or destroyed, the nest is recorded as "destroyed." Collect representative egg shell fragments as desired and either photograph or catalog in an eggshell carton for display.

18. At the completion of the 4-week study, complete and file the Dummy Nest Summary Sheet in your notebook, and fax to D. Rollins at 915-658-4364 upon completion.