

## Project Squirrel Corn Giving Up Density (GUD) experiment

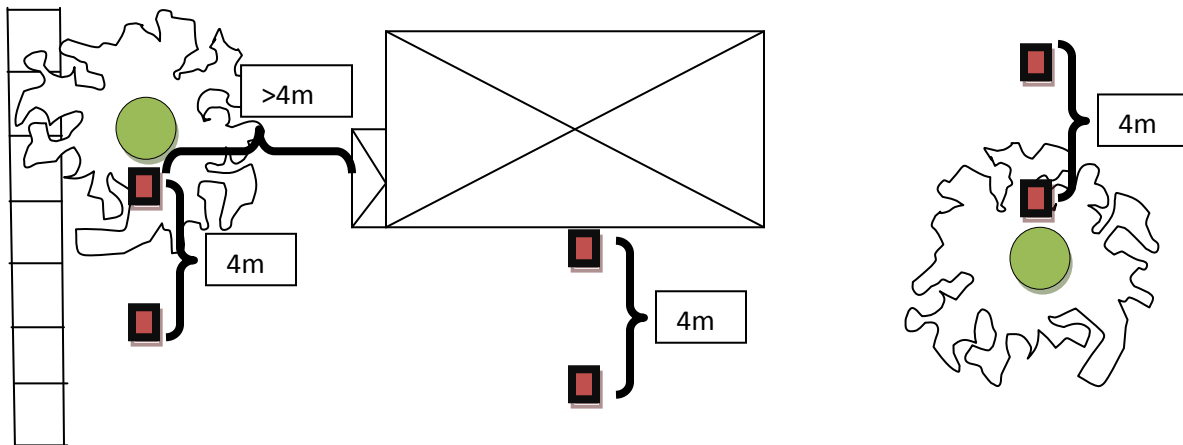
### Materials

Three pairs of foraging patches  
18 ears of corn  
18 bags for chaff

### Methods

Prepare the foraging sites: Choose three sites, one in the front yard, one in the side yard, and one in the back yard for each of your foraging patch pairs. Put one patch at the base of a tree, put the other patch about four meters from the first patch. Make sure the patches are at least four meters from any other tree, wall, fence, or other similar thing.

The diagram below is an example of how a yard might be set up. The patches in the front and back yards are at the base of a tree but since there is no tree in the mid-yard, the patch is set next to the house.



**Bait the patches:** In the morning, screw an ear of corn into each patch. Put the tape that tells the weight of the corn on the patch so it will be easy to get at the end of the day.

**Collect data:** At the end of the day, collect all of the corn that has been eaten into a baggy. Also put the cob in the baggy. If the cob is too big, you can break it so it fits into the baggy. If no feeding has occurred, you can leave the corn on the foraging patch but be sure that nothing else can eat the corn during the night.

MAKE SURE TO LABEL THE BAGGY IN PERMANENT MARKER WITH THE LOCATION OF THE FORAGING PATCH. Use the following labels:

- FN** = Front yard near the tree
- FF** = Front yard far from the tree
- MN** = Side yard near the tree (M stands for Middle)
- MF** = Side yard far from the tree
- BN** = Back yard near the tree
- BF** = Back yard far from the tree

Continue to bait the patches and collect data for three consecutive days.

Activities in the yard should continue as normal. Weather does not matter. If you had to put patches next to something other than a tree (such as the example above, where a patch was put next to the house) make sure to report it.

If you have any questions email [sciurus@UIC.edu](mailto:sciurus@UIC.edu).

When you are done collecting data, let me know and I will weigh the corn. In the future, we may be able to use a volumetric approach but for now the only valid measurement is weight.

Note that the approach we take in this short guide is slightly different than the one discussed in the longer teacher's guide, available at [projectsquirrel.org](http://projectsquirrel.org). We are still in the process of refining these methods to make them as useful and as simple as possible. Your data submissions are helping us develop methods that will be applied around the world to assess the ecology of urban areas. Thank you for your contributions.



A fox squirrel (*Sciurus niger*) that foraged in a dangerous patch.



A grey squirrel (*Sciurus carolinensis*) burying a green acorn.