

# UNIVERSITY OF KENTUCKY

## COLLEGE OF AGRICULTURE • DEPARTMENT OF ENTOMOLOGY

#### ENTFACT-118

### PROCEDURE FOR SELECTING RANDOM LOCATIONS FOR SAMPLING

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These figures are designed to help you remove your personal bias while selecting sampling points. You will have to modify them to fit larger and smaller fields.

1. Divide the field into general sampling areas.

2. Randomly select one number between 1 and 100 for each general sampling area.

3. Enter Table 2. 100 Sets of Random Site Selection Directions, under ENTRY NUMBER, for the random numbers selected. Record the set of instructions.

4. Select the first area of the field to be scouted.

5. Go to the edge of that area. If this is a field edge go 30 paces into the field. This is your starting point.

6. Use the instructions to get the actual sample site.

**As an example:** lets look at a small corn field of 20 acres. According to the scout manual this requires 3 samples to be taken.

1. Divide the field in to three general sampling areas.

2. Select three random numbers say, 2, 31, 24.

3. Look at Table 2 for Entry Numbers 2, 31, and 24 and you will find the following walking instructions (see results listed in Table 1.):

4. Select the first area to be scouted.

5. Go to the edge of the first area. If it is a field edge go into the field 30 paces. From this starting point:

6. Turn right, walk 3 paces, turn back to your original direction, take 19 paces, sample the area in front of you.

7. Go to the next general sampling area and repeat the process using the second set of walking instructions.

Through experience you will find that these numbers are too large or too small to use depending upon field size. If the field is very large, multiply the numbers by 10 or 100. If the field is very small, divide the numbers to keep from running over the end of a sampling area.

Remember the objective is to remove bias from your selection of sites. There is nothing magic about these numbers.

#### **Table 1. Example Site Selection**

Entry Number	Direction Left or Right	Paces Left or Right	Paces Away
2	R	3	19
31	R	3	15
24	L	9	1

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Table 1. 100 Sets of Random Site Selection Directions

Entry	Direction Right or Left	Paces Right or Left	Paces Away
1	R	1	5
2	R	3	19
3	R	16	9
4	R	17	24
5	L	13	17
6 7	R L	5 19	6 4
8	L L	19	4 18
9	R	11	16
10	R	7	20
11	L	25	7
12	R	24	14
13	R	18	11
14	R	6	21
15	L	20	25
16	R	15	1
17	R	21	22
18	L	23	23
19	L	8	10
20	R	2	2
21	L	22	13
22 23	R R	16 12	8 3
23 24	K L	9	12
24 25	L	4	12
26	R	2	6
27	R	12	13
28	L	11	22
29	R	7	11
30	R	4	14
31	R	3	15
32	R	21	3
33	L	16	4
34	R	19	17
35 36	L	5	8
36 37	R L	6 24	19 9
37	R R	24 23	5
39	R	25	1
40	R	15	23
41	L	8	24
42	L	10	25
43	L	20	10
44	R	22	16
45	L	1	20
46	R	9	7
47	L	13	2
48	L	18	12
49 50	L R	17 14	21
50	R	14	18

Entry	Direction Right or Left	Paces Right or Left	Paces Away
$\begin{array}{c} 51\\52\\53\\54\\55\\56\\57\\58\\59\\60\\61\\62\\63\\64\\65\\66\\70\\71\\72\\73\\74\\75\\76\\77\\80\\81\\82\\83\\84\\85\\86\\87\\88\\89\\90\end{array}$		Ç	Away 3 19 10 22 11 12 13 21 20 15 18 8 6 24 4 13 23 14 11 1 25 12 8 7 19 24 6 15 5 21 18 8 7 19 24 6 15 5 21 18 8 7 19 24 6 15 5 21 20 15 18 8 7 19 24 6 15 5 21 20 15 18 8 7 19 24 24 24 25 12 8 7 19 24 24 24 25 12 8 7 19 24 24 25 12 8 7 19 24 24 25 12 8 7 19 24 6 15 5 21 20 15 18 8 7 19 24 6 15 5 21 10 24 10 24 15 5 21 22 12 8 7 19 24 6 15 5 21 10 24 15 15 18 18 7 19 24 10 15 12 8 7 19 24 15 15 18 18 17 24 10 15 15 21 12 8 7 19 24 16 3 22 9 10 12 18 17 29 10 11 17 21 18 18 17 24 10 15 5 21 18 18 17 24 10 19 24 10 15 5 21 18 17 22 10 1 23 10 1 23
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