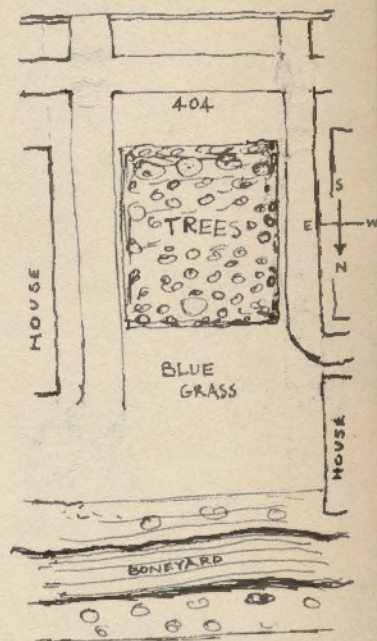


2. RESISTANCE OF THE PRAIRIE AGAINST FOREST INVASION.

In this study the thicket of young trees at 404 East Green St., Champaign was investigated on Saturday morning May 8, '09. The locality was a vacant lot on the north side of the street, with houses on each side. The Boneyard runs perhaps sixty feet north of the edge of the thicket. The level of the ground in the clump of trees is about three feet below the sidewalk and five feet above the Boneyard. The soil is good black loam. The space in front of and behind the trees is covered with bluegrass.

1. KINDS OF TREES.

- | | |
|---------------|----------------|
| 1. BOX ELDER | 5. CHERRY |
| 2. GREEN ASH | 6. PEACH |
| 3. ELM | 7. APPLE |
| 4. SOFT MAPLE | 8. GRAPE-VINE. |

SEED DISPERSAL.

The first four trees have winged seeds and are moderately mobile. They illustrate dispersal by means of wind.

The last four trees have fruits and the seeds are distributed through the agency of birds, (the apple through the agency of man).

SOURCE OF SEEDS. The winged seed trees, with the exception of the soft maple,

very abundant close by. The fruit tree seeds have probably come from some distance, as not many fruit trees are near by.

The dominant trees in the thicket are ash and box elder. They are the largest and most numerous. The very largest trees are all box elder, and they are on the south side, where the light is most favorable. On the north and east edges the light is also better than in the middle and hence the trees are largest here. On the west the house at 402 Green shades ^{the edge of} the thicket as much as the interior is shaded, so the trees there are small.

The reason that the box elder is larger than the ash is that it grows faster. The reason that the fruit trees are no larger is that only recently their seeds have been brought in by birds. The birds would not be attracted to the thicket until the trees had attained a respectable size.

It is interesting to note that the cherry seedlings are most abundant at the edge of the thicket. This is due to light. The light within the thicket is .03 that outside. The cherry seedlings succeed much better outside, toward the light.

In this thicket a good example of the law of the survival of the fittest may be seen. The box elder being of faster growth than the ash, is the larger, but the fact that the ash is more tolerant keeps it from