

Locations/Environments

Yard Layout



Vegetation

Boxelder
 The boxelder is a tree that is common in the Midwest. It is a member of the maple family. The leaves are heart-shaped and turn yellow in the fall. The fruit is a winged seed pod that is eaten by birds.

Red Winged Blackbird
 The red winged blackbird is a common bird in the Midwest. It has a black body with a red patch on its wing. It is a member of the Icteridae family.

Downy Woodpecker
 The downy woodpecker is a small bird with a black and white striped body. It is a member of the Picidae family. It is known for its ability to climb trees and peck at wood.

Robin
 The robin is a common bird in the Midwest. It has a red breast and a grey body. It is a member of the Turdidae family. It is known for its song and its ability to fly.

Blue Jay
 The blue jay is a common bird in the Midwest. It has a blue body with a white chest and a black collar around its neck. It is a member of the Corvidae family. It is known for its intelligence and its ability to fly.

Seed Trays

Open Ground **Under Tree** **On Pool**

Open ground seems to be the best for the birds. Because they can see everything around them. But the seed trays in open ground are mostly empty. The birds usually seem to like the seed trays in the open ground. After ground seed trays were put out, the birds came to get the seeds.



Which location does the birds think is the safest?

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Introduction

Birds are sensitive creatures. They respond to their environment differently than when they are nesting. They pick only environments that seem to be safe. For example, places they can observe the surroundings. And most of the birds are the same, so every sense might not be in their choice. But what environments do birds like that best, or what environments do birds think is the safest and most comfortable?

To ask the question "What environments do birds like the best?" I set up three seed trays in three different places. The first one is open ground, where the birds can see everything around them. The second one is under a tree, where it is cool and shady, and the third one is on a backhoe floating on the pool.

1. Birds like open ground better, because they can see what is around them.
2. Birds like to be under the tree, because it is cooler and that way offers some protection.
3. Birds like to be on the pool better, because they can drink the water and they probably can swim across the pool to get food.

I observed the birds and count the number of birds at each seed tray to determine the birds' favorite location.

Hypotheses:

1. Birds feed on open ground is the safest because they can observe the surroundings, control predators and forests.
2. Birds like to be under the tree better because it is cooler.
3. Birds feed the pool the safest and most comfortable because no predator can swim across the pool and the birds have access to water.

Prediction

Birds feed the pool the safest and most comfortable because no predator can swim across the pool and the birds have access to water.



Data

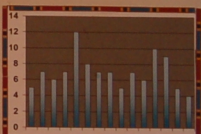
Procedure

To collect data for the research question "Which location do the birds think is the safest?", I set up three seed trays at those different locations with different birdseed.

The first one was on an open ground, second one under a tree, and third one floating on a pool.

Then I observed the three seed trays for 10-15 minutes each time for 10 days, and count the number of birds that visited each seed tray. At the end, I add all the data together to get the total number of birds that visited each seed tray. And the seed tray with the most visits is the birds' favorite location.

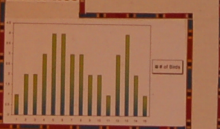
Day	Open Ground	Under Tree	On Pool
1	1	2	3
2	2	1	4
3	3	3	2
4	4	2	1
5	5	1	2
6	6	2	3
7	7	3	4
8	8	4	5
9	9	5	6
10	10	6	7
11	11	7	8
12	12	8	9
13	13	9	10
14	14	10	11
15	15	11	12



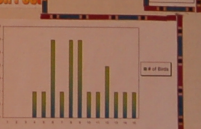
Open Ground



Under Tree



On Pool

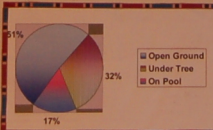


Conclusion

After calculating my data, I discovered that most birds like to visit the open ground seed tray. Through observation, I found the reason. When birds are at open ground, they can see what is around them. For example, I was trying to get birdseed and squirrels. But the birds have never seen me, so they came to my store. And birds that are feeding at the under tree seed tray did not visit my store. And most birds did not prefer my pool seed tray because they did not like it.

Therefore, my prediction about the good having the most visits was incorrect.

And the answer to the question "which location do the birds like the best?" is Open Ground.



Birds

The House Sparrow is a common bird in the Midwest. It has a brown body with a black cap. It is a member of the Passeridae family. It is known for its song and its ability to fly.

The Red Winged Blackbird is a common bird in the Midwest. It has a black body with a red patch on its wing. It is a member of the Icteridae family. It is known for its song and its ability to fly.

The Downy Woodpecker is a small bird with a black and white striped body. It is a member of the Picidae family. It is known for its ability to climb trees and peck at wood.

The Robin is a common bird in the Midwest. It has a red breast and a grey body. It is a member of the Turdidae family. It is known for its song and its ability to fly.

The Blue Jay is a common bird in the Midwest. It has a blue body with a white chest and a black collar around its neck. It is a member of the Corvidae family. It is known for its intelligence and its ability to fly.

The House Finch is a common bird in the Midwest. It has a brown body with a red cap. It is a member of the Fringillidae family. It is known for its song and its ability to fly.

The American Goldfinch is a common bird in the Midwest. It has a yellow body with a black cap. It is a member of the Fringillidae family. It is known for its song and its ability to fly.

The Chickadee is a common bird in the Midwest. It has a black body with a white chest. It is a member of the Paridae family. It is known for its song and its ability to fly.

The Nuthatch is a common bird in the Midwest. It has a blue body with a white chest. It is a member of the Sittidae family. It is known for its song and its ability to fly.

The Starling is a common bird in the Midwest. It has a brown body with a black cap. It is a member of the Sturnidae family. It is known for its song and its ability to fly.

The Crows are common birds in the Midwest. They have a black body and are known for their intelligence and their ability to fly.