

Preliminary Study of Bird Species and Seed Preferences at The Beaver Creek Field Research Station

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Introduction

Field Observations of birds were taken at the Beaver Creek Field Research Station from October 2000 to May 2001. Bird feeders were built to accommodate four different seed types and were placed in three separate habitats within the Field Station. These habitats included old field pond edge, upland conifer, and a wet mesic forest. Blinds were constructed at each site to observe birds. The seed types included: black oil sunflower, cracked corn, finch mix, and peanuts. Species of birds and their individual seed preferences were recorded by observing for 45-60 min. 3-4 times a week. Individuals which landed on the feeder and removed a seed were counted as a hit those that landed on a feeder and kept eating without flying away were also counted as one hit.

Materials and Methods:

Field Observations of birds were taken at the Beaver Creek Field Research Station from October 2000 to May 2001. Bird feeders were built to accommodate four different seed types and were placed in three separate habitats within the Field Station. These habitats included old field pond edge, upland coniferous forest, and a wet mesic forest. Blinds were constructed at each site to observe birds. The seed types on our feeders included: black oil sunflower, cracked corn, finch mix, and peanuts.

Three different habitats were chosen for feeder locations and one feeder was placed in each area. The old Field Pond Edge feeder location was chosen for its proximity to water and the chance of seeing prairie species of birds. Our choice of the wet mesic forest site was its location near a small tributary of Beaver Creek and the over all amount of water in this predominantly deciduous forest. The upland coniferous forest location was decided on for its more dry sandy soil with many pine trees in the immediate area of the feeder. This system allowed us to have only three feeders that we needed to observe each week, yet these three feeders being in vastly different habitats and containing four seed types brought in a large number of different species.

Seed types were chosen for their appeal to as many species of birds as possible. Cracked corn was chosen for its past fame as being bird feed and it was thought by us to bring in squirrels which would bring in some entertainment. Corn was also chosen for its appeal to Blue Jays and other bigger birds. Black oil sunflower seeds were chosen for their high fat content and appeal to chickadees and juncos, which are very common in the area. Our finch mix feed was picked for its appeal to Finches and other colorful birds and was generally eaten after all other seeds were gone. We chose crushed peanuts for their high fat content and its similar texture to suet that would attract Woodpeckers and Nuthatches.

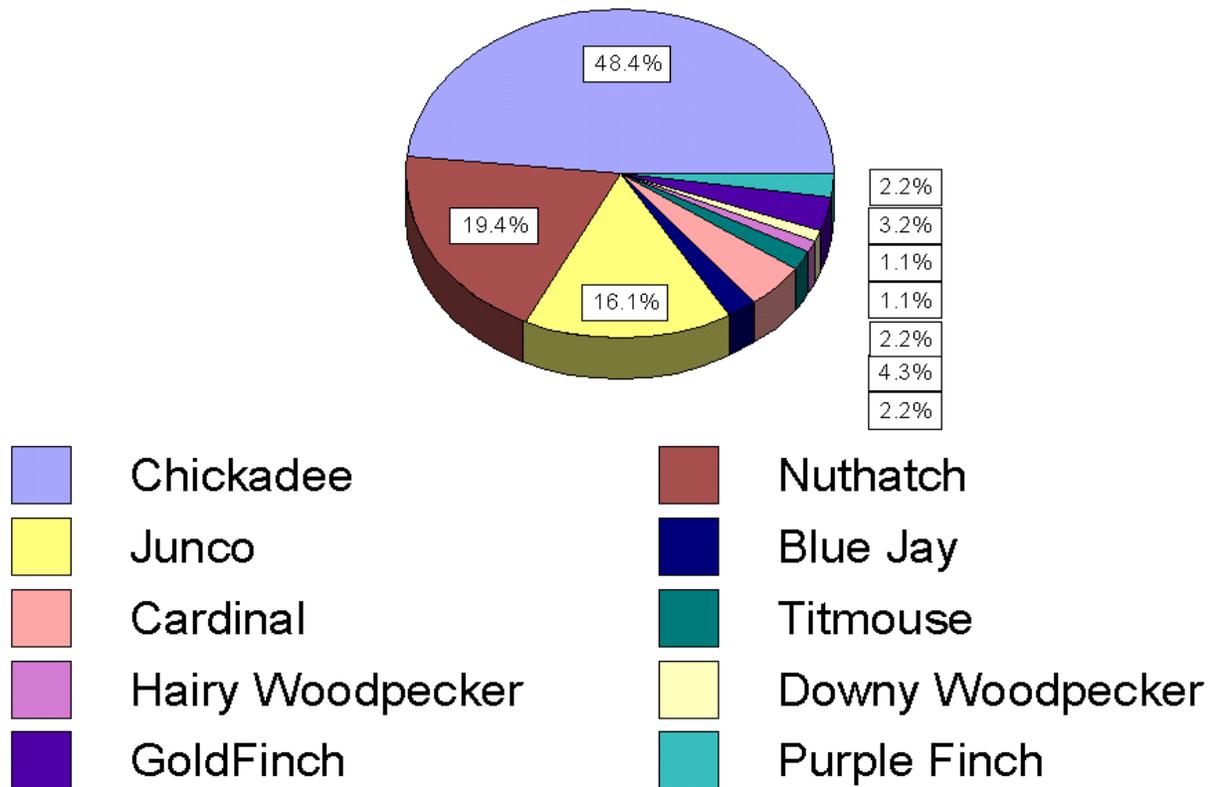
Observations were taken for 45-60 minutes three to four times a week. We would observe in the morning generally from 8:30 to 9:30a.m. These observations were conducted from ground blinds constructed of tree branches and pine bows 20-30 feet away from the feeders. This method of being so close to the birds and having the seed types distinctively separated allowed us to see exactly what seed the birds were taking from the feeder. These

observations were taken by noting the seed type chosen by each bird to take a seed from the feeder. These "hits" were counted when a bird takes a seed and were all counted regardless if it was the same bird returning again.

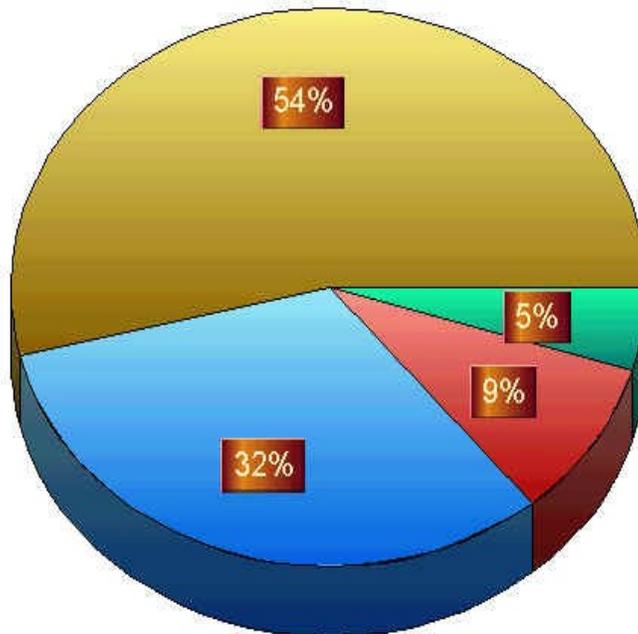
Data and Results:

The results of our field study concluded that the most abundant bird in the area is the Blacked Capped Chickadee. These birds accounted for nearly all the bird action while observing, with a few other species coming in now and then for a snack. The Slate Colored Junco was the "cleaner upper" at our feeders and picked through all the ground material which had been knocked off of the platforms. It was noted that the number of birds at the feeders and the chance of snow or rain in the near future would greatly increase the total number of "hits" and would also bring in many more species then normal.

Bird "Hit" Preferences



Seed Preferences



Conclusion:

Of all the species, the results of our seed preference study concluded that the black oil sunflower seeds were by far the most eaten seed. The percentage of sunflower seeds eaten could be contributed to the high number of Chickadee's in the area which had a very noticeable preference for them. Crushed peanuts turned out to be a big surprise in our study, they were very popular among almost all the birds that came into our feeders and seemed as popular with other species as the sunflowers were with the Chickadee's. The overall number of peanuts taken were less than sunflower because there were fewer other species to take the peanuts. This leads us to believe crushed peanuts would be the overall greatest attractant of birds in the area according to the number of species it brings in.

Bibliography Page

Birder's Handbook, The. Ehrlich, Paul and Dobkin, David S. and Wheye, Darryl. New York, NY: Simon and Schuster, 1998

Birds of Forest, Yard and Thicket. Eastman, John. Mechanicsburg, PA: Stackpole books, 1997

Birds of Wisconsin, Field Guide. Tekiela, Stan. Cambridge, MN: Adventure Publications, 1998

Field Guide to Birds. Eastern Region. Stokes, Donald and Lilian. Stokes, Boston, MA: Little, Brown and Company, 1996

Wisconsin Birdlife, Population and Distribution, Past and Present. Robbins, Samuel D., Jr. Madison, WI: University of Wisconsin Press, 1991

Wisconsin Birds, A seasonal and Geographical Guide. Temple, Stanley A. and John R. Cary, Madison, WI: University of Wisconsin Press, 1987