# Seed and feeder preferences of wild birds of the United States and Canada: A landmark study for the Wild Bird Feeding Industry

by Dr. David J. Horn

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*NOTE: What follows is the text of an article that will appear in an upcoming issue of "Birding Business" magazine.*

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According to the U.S. Fish and Wildlife Service, in 2001, over 50 million Americans over the age of 16 watched birds around their homes. These Americans also spent more than 2 billion dollars on birdseed and 600 million on baths, feeders, and houses. While the public's interest in bird feeding is substantial, the amount of scientific research that has been conducted on wild bird feeding lags far behind. For example, our knowledge of seed preferences is based on a handful of studies each with short-comings. In 1980, Dr. Aelred Geis found that two of the most attractive seeds to birds that use feeders were black-oil sunflower and white proso millet. This study was limited, however, to a few locations and the study's conclusions were restricted to species that were primarily found on the east coast. In the mid-1990's, the Cornell Laboratory of Ornithology conducted a seed study involving thousands of participants, but the study did not examine seed preferences of birds in summer. Similarly, our knowledge of feeder preferences of wild birds is often limited to casual observations of manufacturers, distributors, and sellers, as opposed to careful scientific study. Thus, the most important questions for the wild bird industry have not yet been adequately scientifically answered and published, and the wild bird industry lacks the seminal study regarding seed and feeder preferences for wild birds in the United States and Canada.

At the January 2005 BirdWatch America in Atlanta, the Wild Bird Feeding Industry (WBFI) trade association announced its support for a historic, first of its kind, study on seed and feeder preferences of common backyard birds in the United States and Canada. In turn, this information can be used to provide customers with the best recommendations and products, thereby potentially increasing seed and feeder sales of WBFI members. The focus of the continent-wide study will be to answer questions about seed and feeder preferences of wild birds and how they are influenced by geographic region and season of year.

Specifically, there are five key questions to be addressed: 1) What are the seed preferences of birds that use feeders in the United States and Canada? What are the seed preferences of the mourning dove, house finch, rose-breasted grosbeak, and indigo bunting?; 2) Are seed preferences of birds equivalent in different regions of the United States and Canada? Does a black-capped chickadee in Maine prefer the same seeds as a black-capped chickadee in Oregon?; 3) Are seed preferences of birds equivalent at different times of the year? Does a northern cardinal switch to a higher fat content seed during the winter months to meet its increased metabolic demand?; 4) What are the feeder preferences of birds in the United States and Canada? Do birds have a preference for platform, hopper, or tube feeders?; and 5) Is there an interaction between seed preferences and feeder preferences? When a particular type of feeder is available, do birds eat seeds they would normally not feed on)? In addition to answering questions about seed and feeder preferences, the study will also provide answers on how characteristics of one's yard (i.e., number and types of trees and shrubs) and neighborhood (i.e., urban vs. rural) influences the species and abundance of birds present.

The study will be conducted for three years beginning in Fall 2005 and continue through Summer 2008. The study will be conducted using participants from all of the major eco-regions of the United States and Canada, and would involve two major approaches: observational and experimental. An observational approach will be taken by distributing a feeder survey to participants four times a year (winter, spring, summer, and fall) for up to three years. The survey would collect data about the type of feeders present in the yard, types of seeds offered at each feeder, and the number and species of birds visiting each feeder over a specified period. In addition, the survey will ask questions about characteristics of the participants' yard and neighborhood.

An experimental approach will be taken using a sub-sample of the participants involved in the observational approach. Participants will be assigned specific feeder and seed combinations and asked to record the number of each species of bird present at the feeder. Participants will receive four platform feeders, four hopper feeders or four tube feeders, each filled with a different seed. Participants would then record the number of birds of each species visiting each feeder. After a specified period of time, feeders and seeds within feeders would be rotated to a new combination. Seed and feeder comparisons would be made during each season. Seeds to be tested in the experimental approach include: black-oil sunflower, striped sunflower, medium sunflower chips, white proso millet, whole peanuts, cracked corn, safflower, nyjer, and red milo.

Supporting a study of seed and feeder preferences of wild birds of the United States and Canada would be a unifying undertaking for the WBFI and would solidify the Industry's role as the authoritative source for scientific and information needs by industry members. Specifically, a feeder and seed study of the U.S. and Canada will provide industry members with a seminal scientific study on the seeds and feeders to provide birds with by geographic region and time of the year.

Scientific data from this study will provide WBFI members with a huge strategic advantage in wild bird product development, and improve packaging and marketing proficiencies. Industry members will have the tools required to directly

target various seeds and feeders to specific species in pre-defined regions at various times of the year. Additionally, this data will afford members the opportunity to better serve the consumer market by providing products designed to attract a greater number of wild birds in their backyard environment. As the customer's satisfaction with the wild bird feeding experience increases, so too will repeat sales and revenues.

In 2004, WBFI celebrated its 20th year supporting the wild bird industry. Over the next 20 years, WBFI will serve as the leader in sponsoring research that answers the industry's most pressing questions. This unprecedented seed and feeder preference study will be the first seminal study and answer questions that sellers of wild bird products and services require to better meet the consumer's needs. After its successful conclusion, additional landmark studies on suet preferences, fruit preferences, avian nutrition, and bird safety are sure to follow.

**You and your company can participate in this ground-breaking study!**

There are several ways that you or your company can help make this study a tremendous success. WBFI is seeking citizen scientists who would like to collect data for the study. In-kind contributions of goods and services such as seed, feeders, poles, and baffles are also needed for the project. Finally, financial support is needed to make this study a reality. All citizen scientist participants and contributors will receive continuous acknowledgement and publicity throughout the study period and in perpetuity in the final printed report to be distributed throughout the United States and Canada. To learn more about making your contribution to this international seed and feeder preferences study, please contact: George Petrides, Project Leader, at www.wildbird.com. The Wild Bird Centers of America, Inc. is a national wild bird specialty store franchisor located in Glen Echo, Maryland, a suburb of Washington, DC or Sue Hays, Executive Director, at www.wbfi.org. The Wild Bird Feeding Industry is the trade association for the wild bird and backyard wildlife feeding industry. Continuous updates on the study can be found at www.wbfi.org ❖

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