

**FEEDER USE BY SPRING MIGRANT
ROSE-BREASTED GROSBEAKS
IN NORTH MISSISSIPPI AND ADJACENT STATES**

W. Marvin Davis and David Joseph Horn¹

*Departments of Pharmacology and Biology
University of Mississippi
University, Mississippi 38677*

The Rose-breasted Grosbeak (*Pheucticus ludovicianus*) does not nest in Mississippi, but is regularly seen in spring and fall migration. Species that use seed feeders in the mid-south region are almost exclusively permanent residents or winter residents. Two exceptions to this generality of which we are aware are Indigo Bunting (*Passerina cyanea*) and Blue Grosbeak (*Guiraca caerulea*), both of which breed in the area. However, neither is reported to use feeders consistently or in large numbers. Thus, it is unusual for a neotropical migrant to use seed feeders during migratory passage. We report here the use of feeders by Rose-breasted Grosbeaks in Spring of 1995 in north Mississippi and nearby areas of adjacent states.

The initial report calling our attention to this event was from Dennis Welch of Grenada, Grenada Co., Mississippi, who reported that "two pairs" of grosbeaks were using his feeders from 30 April to 7 May. A later report of two more pairs came from southern Grenada County. At least 12 households in Oxford and elsewhere in Lafayette County had feeder visits by grosbeaks of both sexes during the first 7-10 days of May. In one case, as many as 15 birds were present. Similarly, Margaret Copeland of Starkville, Oktibbeha Co., Mississippi, had calls from 9 residents of that county, most of whom had also for the first time noted Rose-breasted Grosbeaks using their feeders.

In Hernando, Desoto Co., Mississippi, Gilbert Beaver on 7 May observed a grosbeak attempting to use a hanging feeder. After sunflower seeds were provided on a platform feeder, 6 or more Rose-breasted Grosbeaks fed there through 14 May. Beaver had another observation on 7 May at a boat dock business north of West Memphis, Crittenden Co., Arkansas, where a feeder was being used by 7 or 8 grosbeaks. Numerous observers in the Memphis metropolitan area and nearby western Tennessee had an unaccustomed visit by these grosbeaks. These reports were collected by Martha Waldron and Richard Preston. Thus, between 26 April and 14 May 1995,

I received more than 25 reports from persons who had seen Rose-breasted Grosbeaks at their seed feeders for the first time. This was noted in 3 counties of Mississippi and one each of Tennessee and Arkansas. We, along with other birders, observed flocks of Rose-breasted Grosbeaks consisting of both adult males and females and ranging from 2 to 16 individuals.

The experience of a few observers in this area who had prior records of Rose-breasted Grosbeaks coming to their feeders was mainly of single birds: e.g., one male was seen 23-27 April 1990 at a feeder maintained by J.A. Jackson at Starkville. Burleigh (1945) said of Rose-breasted Grosbeaks on the Gulf Coast of Mississippi, "although small flocks of three to five birds are sometimes noted, more often than not only a single bird is seen." More recently, it has been said that the species is "seldom seen in flocks of more than ten or twelve" on the Gulf Coast (Toups and Jackson 1987). The feeder visits of 1995 suggest that there may have been more instances of flocks of Rose-breasted Grosbeaks than is usual for north Mississippi.

The simultaneous visitation by multiple grosbeaks at seed feeders seems to have been unreported previously from this region. There are several possible explanations for this. One is that a "fallout" of Rose-breasted Grosbeaks may have occurred farther inland than usual after trans-Gulf passage in 1995. This could have been caused by exceptional helping winds. A delayed stopover might have tended to increase the urgency of the birds' need to replenish energy stores, thereby making seed feeders the most favorable option for replacing fat levels.

It may be asked whether the Rose-breasted Grosbeak commonly uses seed feeders upon its annual arrival on the Mississippi Gulf Coast. According to Toups and Jackson (1987), "a difficult trans-Gulf spring flight may result in Rose-breasted Grosbeaks at feeding stations for a few days after arrival." However, observers in coastal counties are unaccustomed to a high level of feeder visits: e.g., typically only one or very few cases per year and usually lone birds (C. Cassibry, personal communication to WMD).

Consideration was given as to repetition of the 1995 events in 1996. On the basis of personal observations, local contacts, and the very few responses to a statewide solicitation of reports on grosbeaks in spring 1996, it was apparent that there was not a repetition of the 1995 pattern in Mississippi. However, the Rare Bird Alert for Tennessee of 7 May 1996 carried numerous reports from a wide area on migrant Rose-breasted Grosbeaks coming to feeders in numbers ranging from pairs to flocks of 20-30. One case specified was that on 25 April 1996 there were a "half dozen pairs" at a feeder in Lawrence Co., Tennessee, which borders on the northwest part of Alabama. Efforts to obtain more details of those reports were fruitless. However, it was clear that

such behavior by Rose-breasted Grosbeaks was regarded as unusual by Tennessee observers.

In the spring migration of 1997 there again came numerous reports of "feeder Rose-breasted Grosbeaks" from persons in north Mississippi who had never previously seen the species at their feeders. I sent an e-mail request for information to Arkansas and Mississippi birders and received reports not only for 1997, but also for earlier. From Oxford, Gary Gaston in late April found about 15 grosbeaks competing vigorously for approach to his seed feeder in what was said to be the fourth consecutive year of visits. Allen Jolley in Shannon, Mississippi first had one grosbeak at a feeder in spring, 1996, but on 30 April 1997 had 3 males and 2 females, while his mother next door had 2 males and 2 females. On 2 May 1997 he saw at least 23 grosbeaks, 19 males and 4 females at his feeders at one time; they arrived coincidentally with squally weather.

More e-mail reports came from Arkansas observers: Lucy Sauer and a friend in Little Rock both had their first feeder grosbeaks in spring 1995, repeating in 1996. From Evelyn Good in Arkadelphia on 12 May 1997: "We have had Rose-breasted Grosbeaks coming to our backyard feeders since the late 1980s; I do not have the exact year, but the birds visited prior to a move in 1990. They have been at feeders in our yard for the past 2 weeks."

Douglas James, of the University of Arkansas, Fayetteville, reported that "Rose-breasted Grosbeaks first started visiting feeders in northwestern Arkansas in spring 1994 when massive numbers began frequenting feeders all over towns. That year I got numerous phone calls on the situation -- many people not knowing what the bird was. I soon gathered reports from all over Arkansas, then across Missouri, and even into Virginia. All people said it was the first year that Rose-breasted Grosbeaks had visited their feeders. *So it looks like spring 1994 was the first year, at least in the southeast USA.*" [emphasis added]

From Robert Sargent in central Alabama came word that, "This species is a regular visitor to feeders in this area, as it has been for the past 15 years that I have been birdwatching." Other communicants had recollection of unspecified records for isolated instances of grosbeaks at feeders before the 1990s or even the 1980s.

One might gain the impression that the track of highest density for migrating grosbeaks could shift between years -- more westward across Arkansas in 1994 and more eastward across Alabama in 1996 than for 1995 and 1997, when numbers were high across Mississippi. Data are unavailable to permit an inference as to what may be a "customary" track for the heavier flight of Rose-breasted Grosbeaks across the

southcentral-Gulf states, e.g., whether crossing Alabama more heavily, where it is a "common" transient (Imhof 1976), or Mississippi, where it is "fairly common" (Toups and Jackson 1987). It is clear that from 1994 through 1997 Rose-breasted Grosbeaks have shown a distinctly increasing propensity to use food resources from seed feeders in the southcentral United States.

A related question is where grosbeaks learned to use feeders. It appears most unlikely to have occurred on their wintering grounds in the Neotropics. There also may be limited opportunity on the breeding grounds, for the species has been slow to adapt to nesting near human habitations (Bent 1968). However, use of seed feeders by Rose-breasted Grosbeaks has been noted recently in Michigan (A.D. Geis, personal communication to DJH). It may be that use of feeders was indeed acquired at termination of trans-Gulf migration in the Gulf Coast states, where in recent years there have been increasing numbers of households supplying seeds in spring and summer. This modification of human behavior may have given grosbeaks the opportunity to change their behaviors for coping with migratory metabolic stress. It seems likely that use of feeders restores energy stores more efficiently than would natural feeding patterns. Will such use of feeders continue and become more common among Rose-breasted Grosbeaks on their nesting grounds as well as in migration?

LITERATURE CITED

- Bent, A.C. 1968. Life histories of North American cardinals, grosbeaks, buntings, towhees, finches, sparrows and allies. Part One. Dover Publications, New York, New York.
- Burleigh, T.D. 1945. The bird life of the Gulf Coast region of Mississippi. Occasional Papers, Museum of Zoology, Louisiana State University, Baton Rouge, Louisiana.
- Imhof, T.A. 1976. Alabama birds. University of Alabama Press, University, Alabama.
- Toups, J.A. and Jackson, J.A. 1987. Birds and birding on the Mississippi coast. University Press of Mississippi, Jackson, Mississippi.

¹Present address: *Department of Animal Ecology, Iowa State University, Ames, Iowa 50011*