slightly twisting dives of some meters and catching it. It did this three times while I watched, then on a fourth drop the object fell into the water and was lost.

25 November 1972: An adult flew about fairly high with something in its bill that looked like a small ball. Five times it dropped the object, then dived steeply and caught it from a few to a number of meters down. On a sixth drop it failed to make the catch, and abandoned it.

28 December 1972: An adult on the water lunged and got a sodden leaf, flew up in the air a meter or so with it, dropped it into the water (where it sank) flew down and got it again, and again flew up and dropped it. Over and over it did this. Shortly several more Ring-bills, including at least one subadult, began doing the same thing, and some others tried to snatch the leaves from the holders. From the size, shape and color I could tell with certainty that it was always the same leaf that a bird retrieved and dropped again. These activities went on for at least 5 min after I first noticed them. Ficken (op. cit., 577, 578) cites a report of contagious play by captive Common Ravens (*Corvus corax*).—HERVEY BRACKBILL, *2620 Poplar Drive, Baltimore, MD 21207.* Received 10 February 1978, accepted 19 May 1978.

Temperature and Snowfall Effects on Feeding Station Activity.—The feeding activity of birds often appears to increase on colder days or days with snowfall. A quantitative study of such weather effects became possible by using an automatic feeder designed to count total feeding visits per day. The feeding station was a simple tray mounted five feet above the ground in a small yard in Princeton, Mercer County, New Jersey. Tray walls allowed access only to one side of the feeder, and a photocell projected across this side. Any bird visiting the station interrupted the light beam, causing a relay to record a count. The actual circuit details of the automatic recorder have been reported earlier (Leck and Leck, *Amer. Birds,* **30:** 140–141, 1976).

The feeder was operated from 11 November 1973 to 27 February 1974, and 10,629 visits were recorded. Field data included total number of visits and maximum-minimum temperatures each day (excluding a December vacation period). The most common bird was the locally abundant House Finch (*Carpodacus mexicanus*), but Blue Jays (*Cyanocitta cristata*), Starlings (*Sturnus vulgaris*), House Sparrows (*Passer domesticus*), and other species also frequented this urban feeder. (A feeding station on the ground might well have added additional birds, but the results would probably parallel those from this elevated station.) The seed was a commercial mixture of cracked corn, millet, and sunflower. Changes in feeding station activity with different weather conditions were dramatic. The results are best presented in a chronological review:

NOVEMBER (315 visits)

11–30 November. Mild with daily maxima usually between 40° and 60°F. Several record warm days (max. 75°F). Average 16 visits per day with few or none on warmer days. Most active day (50 visits) was also the coldest.

DECEMBER (1,803 visits)

1–15 December. Mostly mild, including several warm days (max. 62°). Daily maxima usually between 30° and 54°F. Average 35 visits per day.

16–19 December. SNOWSTORM (Heaviest snowfall in two years); daily minima 10°–16°F. Activity increases with an average of 395 visits per day.

20 December. Mild; reduced activity (91 visits).

JANUARY (5,638 visits)

1–8 January. Seasonally cool; daily minima 20°–30°F. Average 100 visits per day.

9–11 January. HEAVY SNOWSTORM (three-inch accumulation). Rapid increase in activity with an average of 865 visits per day.

12–14 January. Cold with snow cover. Average 484 visits per day.

15–17 January. Mild weather; daily maxima 40°–50°F. Average 150 visits per day.

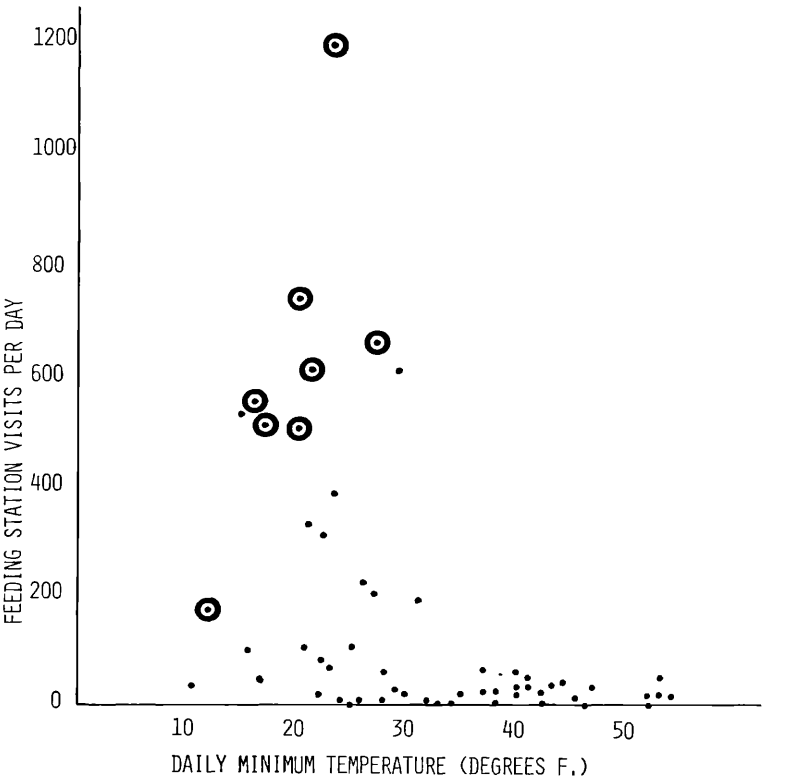

FIGURE 1. Total number of feeding visits per day of all birds at a feeding station versus daily minimum temperatures. Days with snowfall are indicated by circles.

FEBRUARY (2,873 visits)

1–27 February. Seasonally cool with daily minima usually between 11° and 31°F. Average 106 visits per day. Higher rates were recorded with the minor SNOWSTORMS on 3 February (503 visits) and 25 February (615 visits).

These records clearly show the low feeding rates during warmer weather and the marked increases in feeding activity with colder temperatures and/or snowfall, and are summarized in Figure 1. Activity is low on days with minimum temperatures greater than 30°F. Some variations in feeding rates could result from small *seasonal* changes in the number of local birds visiting the feeder, but such variation was minor in this case. Changes in levels of visitation were rapid with daily, rather than seasonal, responses to weather conditions. The magnitude of the activity increases with cold, and particularly with snowfall, is impressive and supports the admonition to keep feeders full with seed during harsh weather.

The increases in feeding activity are attributed to three factors, all of which seemed important here: (1) individual birds increase their visits with harsh weather, (2) numbers of birds rise with neighborhood invaders, and (3) several additional species became visitors after snowfalls (e.g. *Molothrus ater* and *Carduelis tristis*).—CHARLES F. LECK, *Department of Zoology, Rutgers University, New Brunswick, NJ 08903.* Received 17 June 1977, accepted 10 June 1978.