

Notes

An Example of Crow Intelligence

George M. Fairfield

“Crows are known to be very adept at learning and to meet new and previously inexperienced conditions” (Gross 1946). Alfred Otto Gross (1946) cited experiments that showed that pet crows (*Corvus brachyrhynchos*) could very quickly analyze and take advantage of emergent situations.

The heavy snowfall that occurred in Toronto on the night of 13-14 November 1997 provided me with an opportunity to observe wild crows taking advantage of a new situation. I was surprised when I looked at our bird feeder just after daybreak to see a crow pick up a peanut from the ground under the feeder and fly off with it. In the past, we have not seen crows come into our backyard except in the spring when they are searching for songbird nests around the house. We have never had them visit our feeder. We feed niger seed, sunflower seeds, beef fat and peanuts-in-the-shell, each food contained in the appropriate container and all suspended from arms on a single, squirrel-proof pole. The containers are all much too small to support a crow. I surmised that with 11 centimetres of fresh snow on the ground, the crow must have been finding food scarce.

The peanuts are “served” in a wire cage so that the Blue Jays (*Cyanocitta cristata*) have to pry them out before flying off with them. In doing so, they invariably spill one or two on the ground where they are eaten by the squirrels. On the morning of the 14th, there were five squirrels under the feeder. There were also three crows in the tall maple in the neighbour’s yard.

I watched for a few minutes as the crows sat quietly in the maple. Soon a Blue Jay flew to the small mountain ash in our yard, and the crows sat up and fidgeted in a way that I took to be anticipation and/or preparation for flight. When the Blue Jay flew to the feeder and spilled a peanut, a crow swooped down, picked it up and flew off with it. This behaviour was repeated several times. It was apparent that the crows were waiting for the arrival of the Blue Jays, and following them in to the feeder to get the spilled peanuts before the squirrels could get them.

After approximately one half hour, the peanuts were gone, and I went out to refill the feeder. The birds left and there were no jays or crows in sight as I continued my watch. After a few minutes, a Blue

Jay flew to our mountain ash tree. Almost immediately, two crows arrived back in the maple. The Blue Jay flew to the feeder and flew off with a peanut. In so doing, it spilled a peanut and one crow flew down and retrieved it before the squirrels could get it.

The interesting thing to me is that the crows quickly associated the arrival of Blue Jays with the availability of food. They were using the Blue Jays as “gofers” to make the peanuts available to them. Webster’s New World Dictionary (1988) defines *gofer* as “an employee who performs minor or menial tasks such as running errands”.

I had been feeding peanuts to Blue Jays in the way described above for over a year and had never seen the crows behaving in that manner before. The difference that time may have been the heavy ground cover of fresh snow. Since the snow occurred well before the onset of winter, it probably covered the food supply that was normally used by the crows at that time of year.

I recall seeing Gray Jays (*Perisoreus canadensis*) acting as

“gofers” for Blue Jays when I worked in northern Ontario in the 1950s. The Gray Jays would come to our lunch spot, mooch pieces of sandwich, fly off and cache them in nearby trees for later retrieval. The Blue Jays would not approach closely enough to take our food offerings, but waited farther off in the woods and took the food caches left by the Gray Jays.

Granted, the two situations described above are not exactly parallel. The Blue Jays may have had a very long time to learn to follow Gray Jays and parasitize them for food. The case of the crows following the Blue Jays appeared to be an emergent situation. The crows quickly recognized that the arrival of the Blue Jays signalled that food would soon be available, and took advantage of the situation. Such a situation was not likely to happen very often. In fact, I never saw a re-occurrence despite a careful watch over the following winter.

Literature Cited

- Gross, O.G.** 1946. Eastern Crow. *In* Life Histories of North American Jays, Crows and Titmice (A.C. Bent, editor). United States National Museum Bulletin 191, Part II, Washington, D.C.

George M. Fairfield, 332 Sheldrake Blvd., Toronto, Ontario M4P 2B8