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Maroon-bellied Conures feed on gall-forming homopteran larvae.—Neotropical parrots eat mainly fruits and seeds (Forshaw 1989, Sick 1993), although there are some instances of insects and mollusc predation (Moojen et al. 1941, Roth 1984, Forshaw 1989, Sazima 1989). In March 1991, in Iowland forest at Ilha do Cardoso State Park (25°03'05"S, 47°53′48″W; site description in Barros et al. 1991), I found a group of seven Maroon-bellied Conures (Pyrrhura frontalis) on the canopy of a 12-m-tall massaranduba tree (Persea pyrifolia, Lauraceae). The birds' bills were stained with a milky substance. They were eating one-cm-diameter galls that covered most of the leaves. The conures took the galls that grew along the margins of the leaves or took the entire leaf. The galls were held with one foot and opened with the bill. I could clearly see the conures picking white larvae from each gall, discarding the latter, macerating the larvae in their bills, and then swallowing them. The tree was fruiting, but the birds ignored the fruits completely. They continued to feed on the gall's larvae for 30 min. After they departed, I examined the ground under the tree and found it littered with opened galls, pieces of leaves, and a few unscarred fruits. Galls collected from the tree contained larvae that belonged to an homopteran. Two years later, during the first two weeks of March 1993, I made daily visits to the same tree. Maroonbellied Conures were feeding on the gall's larvae every day. The galls, when young and small, were green like the leaf. Upon reaching their maximum size they became rusty-red. The conures took only mature galls, which contained the largest larvae.

Persea pyrifolia and other Lauraceae are known to be commonly infected by galls containing insects (J. Baitelo, pers. comm.). The tree's specific name was given due to the red color they get when infested by galls (F. de Barros, pers. comm.). Such infestations occur yearly and are a predictable resource for a gall-feeding animal.

There is a parallel between eating larvae in galls and eating seeds in fruits, and both food resources require the same mechanisms for locating and processing. It is well known that parrots know the precise location and timing of a food source and will use it year after year at the same season (Sick 1993). This probably applies to my observations during 1991 and 1993. Although the published information on eating of animal species by Neotropical parrots is scarce, such behavior may be more common and widespread than thought. Forshaw (1989) indicates that parrots are far more insectivorous than is generally suspected. Moojen et al. (1941) found 30 larvae of Diptera (Cecidomyiidae) in the stomach contents of two Bronzewinged Conures (*P. devillei*), and although this was considered a case of accidental ingestion, that seems unlikely. Schubart et al. (1965) found moth and Diptera larvae in the stomach of a Peach-fronted Parakeet (*Aratinga aurea*) and that 13 Diptera larvae were eaten by a Santarem Conure (*P. picta amazonum*). Captive Brazilian parrots are known to eat mealworms and meat, especially while breeding and as youngsters (Sick 1993; N. Kawall, pers. comm.). I believe that most instances of "accidental ingestion" of animal prey by parrots, in fact, represents intentional feeding of such items.

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Redirected copulation by male Boat-tailed Grackles.—Animals may direct activities toward an object or animal other than the usual releaser for the behavior (="redirection", Moynihan 1955), even though such a releaser may be available, at least in part (Ficken 1977). Redirected aggressive behavior has been reported frequently, but instances of redirection involving sexual tendencies are rare, usually involving captives (Ficken and Dilger 1960).

During observation periods totalling about 600 h in the breeding seasons of 1988–1993, I recorded four incidents of male Boat-tailed Grackles (*Quiscalus major*) copulating with objects other than female grackles. At Magnolia Gardens, South Carolina, on 15 June 1988, at 09:30 h EST, an unmarked adult (after second year) grackle copulated with a clump of dirt. The copulatory posture resembled that normally given by male Boat-tailed Grackles copulating with females: beak pointed down, wings spread and quivered, tail spread, plumage fluffed. The clump was roughly circular (ca 8 cm diameter). Between mounts, the grackle walked around the clump and assumed the cock-posture (Selander and Giller 1961). The male mounted the clump at least five times, but had difficulty in maintaining an upright position on the clump, because it rolled.

At Magnolia Gardens on 23 May 1991, at 08:19, a color-banded adult (3-yr-old) male copulated with a magnolia (Magnolia grandiflora) flower in the outer subcanopy of the tree, at about 15 m. The bird made ventral contact with the underside of the flower, which was made possible by the flower's slightly inverted position on its stem. After dismounting, he left the tree, but returned 8 min later. He landed next to the same flower, sang, and again copulated with it for 2 sec. He then flew from the tree, and was intercepted (supplanted in flight; Post 1992) by a marked adult (≥5-yr) male above him in the local dominance hierarchy. The dominant bird then landed directly on the same flower, and copulated with it for 3 sec, dismounted, sang, and then left the tree. He returned 29 min later and again landed directly on the same flower, copulated 3-4 sec, and then left to join a nearby group of feeding males.

On Sullivan's Island, South Carolina, on 21 June 1993 at 10:00, an unbanded secondyear male grackle attempted to copulate with a faded green tennis ball (diameter, 6.4 cm). Although the bird appeared to have his vent in contact with the ball, he was unable to