

FROM FIELD AND STUDY

The Scratching of the Spurred Towhee.—The Spurred Towhee (*Pipilo maculatus montanus*) is a perching bird that has entered the field of scratching to earn a living. In Zion Cañon in Utah it is an inhabitant of the dense thickets of oak, sarvis-berry, squawbush and streamside deciduous trees. It is primarily a ground-living bird, nesting among the thickets and hunting its food chiefly among the trash and leaves, but does not hesitate to ascend the trees and brush at other times.

Certain other birds, such as the Long-crested and Woodhouse jays that frequent such thickets in Zion Cañon, usually garner their supply of insect food from the tree tops or from the visible supply on the surface of the ground, but the towhee has a specialty all its own that they do not reach. If the visible food supply on the surface is not sufficient for its needs, the towhee takes to turning over the leaves and scratching among the trash with its feet. This is a complex operation that it is fitted admirably to perform. The Woodhouse Jay will, on occasion, dig with its bill into the trash to follow an insect that has disappeared or to hide an acorn, but it does not use the feet in scratching and does not make a business of dipping into the trash.

Scratching birds like chickens stand on one leg and scratch with the other, but not so with the towhee. Being a small bird, it would have a difficult time turning over a leaf with one foot while standing on it with the other. Such difficulties are solved by using both feet. In order to use both feet, the body must be balanced in the air during the scratching operation.

This is accomplished by jumping into the air and drawing the feet backward while the upward momentum lasts. Drawing the feet backward and raking trash or leaves at the same time tends to overbalance the body forward. The bird uses several methods to hold its balance, either singly or in combination. Nearly always, the scratching motion of the feet is accompanied by an upward and forward jerk of the tail. Sometimes the wings flutter forward, and always after the scratching stroke the feet are brought forward quickly to catch the body and keep it from falling. Sometimes a backward movement of the body is made in jumping and the feet rake the trash while the momentum lasts. This is accompanied by a downward movement of the tail. All of these movements are carried on automatically and seemingly with the greatest of ease.

Sometimes, when the jump is made, the feet are thrust forward and trash in front of the bird is caught and pulled backward. Other times material underneath is moved, while occasionally material just behind the feet will be kicked out of the way by vigorous backward strokes.

Sometimes the trash is kept flying by quick successive strokes, but if insects, spiders or other interesting food items are exposed to the eye of the bird, it suddenly stops and picks up such items one by one. And thus it taps a food supply not available to its competitors in Zion Cañon. On one occasion, I saw a Woodhouse Jay make a dart at a towhee. The smaller bird merely flitted away a few feet and stopped. The jay did not pursue any farther. At another time, a gray rock squirrel came nosing around very close to the towhee, evidently paying no attention to the bird. The bird, however, flitted quietly out of the way a few feet and went on scratching.—A. M. WOODBURY, *University of Utah, Salt Lake City, Utah, November 19, 1932.*

Traveling Speed of White Pelicans.—On the late afternoon of November 14, 1932, I was able to take the steady flying speed of a large flock of White Pelicans (*Pelecanus erythrorhynchos*) numbering approximately 120 individuals. The flock followed York Boulevard in the Highland Park district of Los Angeles from Glassell Boulevard to and across the Arroyo Seco, a distance of 3½ miles. Owing to traffic signals it was impossible to maintain vehicular speed identical with that of the pelicans for other than short distances. After numerous attempts to stay with the fowl, it was apparent they were making a little better than 30 miles per hour, or more precisely, 31 miles per hour with an error of plus or minus one.—ROLAND CASE ROSS, *Los Angeles City Schools, Los Angeles, California, December 7, 1932.*