

of Tehuantepec, first southward, then eastward, over Pacific waters adjacent to the frontier of Chiapas and Guatemala.

Additional records of both migrant species and resident forms of highly volant species in the Tehuantepec region are to be expected over the Pacific in the area of Chiapas and Guatemala.—O. MARCUS BUCHANAN and HARRY L. FIERSTINE, *Dickey Collections and Department of Zoology, University of California, Los Angeles, California, September 27, 1963.*

A Vagrant Occurrence of the Black Phoebe in Southeastern Washington.—On September 4, 1962, four biologists and I observed two Black Phoebes (*Sayornis nigricans*) on the Atomic Energy Commission's Hanford Reservation in southeastern Washington. The birds were seen feeding and perching within a narrow, precipitous walled ravine about 30 feet deep and perhaps twice as wide. A small permanent stream flows through the ravine. The riparian vegetation consists of a dense growth of herbaceous plants and shrub willows. The surrounding upland vegetation is dominated by vast expanses of sagebrush.

Previous sight records of the Black Phoebe from Chehalis, Washington, and from Umpqua Valley and Salem, Oregon, date from before 1900 (Jewett, Taylor, Shaw, and Aldrich, *Birds of Washington State*, 1953:675; Gabrielson and Jewett, *Birds of Oregon*, 1940:605).—W. H. RICKARD, *Hanford Atomic Products Operation, Richland, Washington, July 26, 1963.*

Note on the Feeding Habits of the Caracara in South Texas.—Various published notes on the feeding of the Caracara (*Caracara cheriway*) concur on two points in particular. One has to do with the place of carrion in the bird's diet, and the other relates to its frequent association with vultures. Bent (U.S. Nat. Mus. Bull. No. 170, 1938:133) referred to a peculiar habit of the Caracara in robbing Brown Pelicans (*Pelecanus occidentalis*) of fish being carried to their young. On the other hand, Haverschmidt (Condor, 49, 1947:210) reported that in Dutch Guiana, Caracaras fed on the drying meat of cocobanuts.

For years in lower south Texas, Caracaras cruising along over highways just at daybreak have been a common sight. Each morning they find and feed on animals killed by highway traffic in the preceding afternoon and night. Food thus readily available includes rodents, rabbits, armadillos, opossums, skunks, raccoons, an occasional coyote, snakes, and a variety of birds. This was particularly noticeable along U. S. Highway 281, between Falfurrias and Edinburg, through the 1940's.

Another interesting practice on the part of some Caracaras is to rob vultures of their partly digested food, but I have not found any account of this in the literature. On four occasions I have watched Caracaras swoop down over Turkey Vultures (*Cathartes aura*) and drive them up from where they were feeding on carrion. Then, in each instance, the Caracara pursued a vulture until the latter regurgitated. Thereupon, the pursuer flipped over into a dive and snatched one or more pieces of the falling food before it reached the ground. In three of the instances, the Caracaras were observed to land and pick up additional material, presumably some particle missed in the aerial grab. All of the occurrences were out in open pastures where the view was not obstructed by trees or shrubs.

The four observations mentioned above were made at the following times and places: October 20, 1940, on the Stafford Ranch, 11 miles west of Eagle Lake, Colorado County, Texas; September 23, 1942, on the O'Brien Ranch, 15 miles southwest of Goliad, Goliad County, Texas; September 3, 1945, on the Lasater Ranch, 6 miles southeast of Falfurrias, Brooks County, Texas; August 18, 1955, on the Welder Refuge, 10 miles northeast of Sinton, San Patricio County, Texas.

On the last occasion, Dr. Clarence Cottam and I were together, driving over the Welder Refuge. I had barely finished telling him of my earlier observations when we saw a lone Caracara swoop down over two feeding Turkey Vultures, drive them into flight and pursue one until it regurgitated.—W. C. GLAZENER, *Welder Wildlife Foundation, Sinton, Texas, May 16, 1963.*

Open-billed Probing by the Princess Stephanie Bird of Paradise.—In discussing the skull structure of the Paradisaeidae, Bock (Condor, 65, 1963:91-125) has commented on the lack of information concerning the feeding habits of most of the species in this family. I have been able to observe feeding behavior of an adult male of the Princess Stephanie Bird of Paradise (*Astrapia stephaniae*)

in the gardens of the Zoological Society of London. This species has a straight and relatively slender bill. In the aviary where it was housed, mealworms were usually thrown down onto an area of peat, and some would burrow into the substrate. On several occasions the bird was seen to perform an open-billed probing, or "zirkeln," movement in search of these. The movement was similar to that seen in the European Starling (*Sturnus vulgaris*), the closed bill being thrust down into the peat and the mandibles then parted, forcing the material apart. Probing sometimes occurred to the full length of the bill. On one occasion the bird was watched feeding from an open tray, where it was observed using a similar "zirkeln" movement to break open pieces of soft fruit before eating fragments of them.—C. J. O. HARRISON, *Bird Section, Department of Zoology, British Museum (Natural History), London, May 22, 1963.*

Unusual Feeding Behavior of a Goshawk.—On two occasions in 1963, I observed an interesting method of prey-capture by an adult Goshawk (*Accipiter gentilis*). These observations were made at an elevation of 7800 feet within the ponderosa pine forest of the Santa Catalina Mountains, Pima County, Arizona. On February 20, a Goshawk had located a large Abert squirrel (*Sciurus aberti*) in a tall ponderosa pine. When I first observed the hawk, it was hopping from branch to branch chasing the squirrel through the tree. The hawk appeared always to remain below the prey and to keep the squirrel continually moving by means of a relentless chase. After fifteen minutes of chase the hawk then grabbed the squirrel and both fell to the ground, the hawk apparently killing the prey immediately.

On March 8, I noted the hawk, presumably the same individual, preening in a large pine within a quarter mile of the first observation. Presently an Abert squirrel began to ascend an adjacent tree. The hawk spotted the prey at once and, instead of directly attacking the squirrel, flew to a branch below it. Then, as in the previous case, the hawk chased the prey through the tree. At one point the squirrel even jumped to a branch of an adjacent tree, but the hawk flew over and pursued the squirrel in a similar manner from branch to branch in this new tree. Finally the hawk grabbed the squirrel as it was attempting to scamper down past the hawk. This attack lasted for ten minutes.

In both instances the hawk gave chase with concomitant screams. It was this screaming that attracted my attention in the first instance. In neither case did the hawk initially press its attack to the point of attempting to grab for the prey at every jump; it simply kept close to the prey. Whenever the squirrel would attempt to flee downward, the hawk would chase it back up. This persistent, although rather unhurried, chase and the continual screaming on the part of the hawk appeared to tire the squirrel to the point of both physical and mental exhaustion. I suspect that after ten or fifteen minutes of such a pursuit, fear as much as anything led to the relatively easy capture of the squirrels.

The normal feeding procedure of the Goshawk is a rapid dive upon a rather unsuspecting prey (Bent, Bull. U.S. Nat. Mus. 167, 1937:133). Such an attack can be made within forest cover. But my observations represent a completely different technique of prey capture. Cram (*in Bent, op. cit.*:132) reported a case in which a Goshawk followed a rabbit on snow-covered ground by means of walking "much like a crow." Cram believed that Goshawks occasionally hunt rabbits in this manner when the underbrush is too dense to allow the hawks to fly through it. I can find no reference noting Goshawks, or any other accipiters, pursuing prey in a tree by hopping after it from branch to branch.—PETER W. WESTCOTT, *Department of Zoology, University of Arizona, June 10, 1963.*