

inch. Weight, 0.9 ounce, 24 hours after death ensued. The bird now reposes in the zoological collections of the New York State Museum in the form of a study skin, catalogue number 6244.—DAYTON STONER, *New York State Museum, Albany, New York.*

Speed of the Starling.—While driving westward on March 7, 1941, near Clarence, Erie County, New York, I was fortunate in making a rather accurate timing of the speed at which a Starling (*Sturnus vulgaris*) was flying. It flew parallel with our car for over half a mile, and maintained a speed of 55 miles per hour. This is slightly faster than the greatest rates previously recorded: 48.5 m.p.h. by Meinertzhagen, and 51.4 m.p.h. by Campbell (Cooke, U. S. D. A. circular no. 428, 1934). My companion and I who had been walking a half hour before, had commented on the fact that the air was quite still; and it is likely that the air had little, if any, influence upon the speed of the bird's flight.—EVERETT W. JAMESON, JR., *Ithaca, New York.*

Speed of a Woodcock.—On January 11, 1941, the writers were traveling near Lufkin in Angelina County, Texas, when a Woodcock (*Philohela minor*) flushed in front of the car. It was early evening, the headlights clearly revealing the identity of the bird. It flew in front of the car for some fifty yards before darting into the brush at the side of the road. During this time the car was moving at the speed of 35 miles an hour. The woodcock was flying at a greater speed than the speedometer indicated, since it was moving away from the car when it disappeared.—ROLLIN H. BAKER, AND COLEMAN C. NEWMAN, *Texas Game, Fish and Oyster Commission, Lufkin, Texas.*

A Duck Hawk attacks a Raven.—A short time ago while in Lexington, Virginia, for a few days I witnessed a very strange sight. On the afternoon of April 7, 1939, Mr. John Welles and I took a trip to a nearby mountain to look for a Raven's nest that I had seen there last spring. Just as we located this year's nest, I heard the cry of a Duck Hawk. Knowing that this bird is rare in this vicinity I immediately stopped to look for the bird. From around the end of the range came the Raven with the Duck Hawk flying high above it, calling loudly. The Raven croaked a few notes of protest but continued its slow and deliberate flight along the range. As I watched this unusual sight, I saw something at which I still marvel.

The Duck Hawk stooped at the Raven, calling faster. Just at the point when I expected to see the Raven get a hard blow, it flipped over on its back with its feet up in the air, and warded off the blow. I could not make out whether it used its feet or just assumed an attitude of guard. The Raven did not seem to use its wings in turning over, but was over in a small fraction of a minute. At this the falcon swooped up in the air again, still screaming loudly. The Raven turned over again just as quickly as it had turned upside down, and resumed its course slowly and steadily along the face of the mountain. The Duck Hawk having again reached its position over the Raven, stooped as it had before. Again the Raven turned over on its back to ward off the blow. This performance was repeated eight times as the Raven crossed before me and finally settled in a pine tree at the end of the cliff. The Duck Hawk swooped up to a tall, dead tree nearby and sat there motionless. The next thing I saw was the pair of Ravens flying back along the top of the mountain, and the Duck Hawk was nowhere to be seen. The Ravens were calling as they flew past me again.

The young were calling loudly so I easily located the new nest and climbed up

near enough to see that it contained two young. These young were well covered with down and I should say they were about two weeks old. We hurried from the mountain so as not to disturb the nest any more and also in order to reach the bottom before dark. I can find no reference in literature to such an incident, but such encounters may be more frequent than we think.—J. SOUTHGATE Y. HOYT, *Cornell University, Ithaca, New York.*

Hunting strategy of Pigeon Hawks.—Since the Western Pigeon Hawk (*Falco columbarius bendirei*) is not a common bird, to see six of them within about two hours is in itself an ornithological thrill. However, the activities of these particular birds more than doubled the worth of the experience.

In the late afternoon of February 2, 1942, I left Nogales, on the Arizona-Sonora border, for Guaymas by train. With me was Ken Stott of San Diego, a reliable bird student in whose company I have often been afield. About an hour and a half before sunset, as we were clattering through a valley that was of Upper Sonoran character, we noticed a dark, swift-flying little hawk approaching the train at an oblique angle. When it had approached to within about fifty feet of us it straightened its course and, with swift, steady wing beats, remained opposite our window for perhaps twenty seconds. Then, with a sudden spurt of speed it shot into a parabolic climb. Fascinated by the energetic grace of the bird, I kept my gaze fixed upon it, with the result that when it suddenly threw its feet forward and snatched a small bird in midair I was almost as surprised as the victim! There followed a moment in which the hawk recovered its poise and the little bird struggled its last. Then the Pigeon Hawk drew sharply away from our moving window and at the same time lowered and raised its legs several times, apparently driving its talons repeatedly through vital parts of its prey.

About ten minutes later, while the picture of this swift drama was still vivid in our minds, we found that a second intent and speedy Pigeon Hawk was abreast of our car. We were in the third one back from the locomotive and evidently at the strategic point that is chosen by these wily hunters. Like his predecessor, this hawk suddenly accelerated his speed. This time I anticipated his direction sufficiently to see two small birds stop suddenly in full flight and drop like inanimate bodies into a mass of thorny scrub below. Frustrated, the hawk swung sharply upward and in a gliding arc returned to his vantage point near our car. Less than half a minute later, a swift forward lunge netted him a small bird. With this hanging motionless in his clutches he passed directly over us and out of sight beyond some leafless sycamores to the west.

Now we kept a constant vigil by the windows on both sides of the car, which fortunately was nearly empty. Five minutes later a third Pigeon Hawk appeared. It repeated almost exactly the manoeuvres already described, except that it missed two kills and switched from one side of the train to the other before finally bringing a bird into its grasp. Three more of the hawks and three more similar performances were observed in the course of the next three-quarters of an hour. The last bird missed more kills than had the earlier ones and apparently gave up without success when the dusk had deepened into near blackness.

We concluded that the six hawks were different individuals, since they were seen at intervals ranging from approximately five to fifteen minutes. The train travelled at a speed of approximately forty miles an hour, as nearly as we could judge. At this rate it would hardly seem probable that a single bird could make more than one appearance.