



PHOTO. BY THOS. H. JACKSON.

YOUNG BROAD-WINGED HAWKS.

On the Nesting of the Broad-winged Hawk (*Buteo platypterus*) and Goshawk (*Astur atricapillus*)
in Pennsylvania

BY ROBERT P. SHARPLES

Every year the Broad-winged Hawks are becoming more numerous in Chester county. They seem to be spreading over this territory much as the Barn Owls did a few years ago. The first nest of which I have record was found near Hershey's Mill on May 3, 1891, and two eggs was taken from it by S. B. Ladd. He was passing along a nearby road on May 1, when he met a man carrying a dead Broad-winged Hawk, which had just been shot. A search two days later resulted in finding the living parent incubating the eggs. They had been laid in an old nest of the Cooper's Hawk, about seventy feet up, in a chestnut sprout, which grew in the woods near a pond. Within the last five years one to three pair of these hawks have been located as breeding near West Chester every season, and this spring I have found seven nests without making any especial search for them. There is a nest about 70 feet high, in the Castle Rock Woods, and four others are in the Brandywine Valley near Downingtown.

Formerly the Cooper's Hawk and the Red-tail were the most numerous hawks hereabouts. Now I never find more than one of each of these in a season, and they have become rare as breeders. The Broad-winged Hawk, which has taken their place, generally builds its nest in May, just as the forest leaves are coming out, and it benefits from their shelter. The nest is always a new one, so far as my experience goes, with the single exception noted above; and usually but two eggs are laid, though this year every nest examined had three eggs in it. In one case where a set of perfectly fresh eggs was taken the birds laid a second set, and I am inclined to think this is a usual occurrence. Green leaves, pulled nearby, were found on every set of eggs.

The favorite nesting site is a chestnut-sprout woods of good height, and nests are placed right against the main trunk of a tree, usually from thirty to forty feet from the ground, though I have found two this year that were seventy feet high. The bird is not a timid one. One nest near Coatesville was quite near to a country school house, and directly above the path used by the children in coming to the school building.

It is rather easy to determine when young birds are in the nest, as they seem always to sit in the nest with their heads toward the center, so that when they evacuate the ejecta are thrown entirely clear of the nest structure, forming a more or less uniform ring of droppings around the foot of a tree.

The Broad-wing does not destroy the farmers' poultry, neither does it disturb other birds. It lives in the woods and subsists largely on insects, and may be safely classed as a beneficial Hawk. As a consequence the farmers do not have much opportunity, even had they the desire, to destroy it.

THE GOSHAWK.

My friend, Mr. R. B. Simpson, of Warren, Pa., has found the Goshawk breeding this spring near his home, and the event is so interesting that I present a record of it, quoting from Mr. Simpson's letters:

"February 22, 1909, was beautiful, warm and sunny. I took a long walk above Morrison's Run into the heavy timber, mostly giant white pines, with a good sprinkling of hard wood. While going along a Goshawk flew out ahead, calling loudly, and alighted. As I went that way it flew again, only a short distance, but was lost to sight in the heavy timber. Before long I heard a noise, and in looking up saw that the Goshawk had alighted almost overhead. It left at once but flew only a short distance, calling most of the time. I soon saw a big nest in the forks of a pine close by. It hardly seemed possible that this bird was getting ready to breed so early, so I went back some distance and sat down. The Hawk stayed near, calling frequently.

"On March 9, 14 and 19 I went up to the spot, and every time found the female in the big trees, and always close to the

nest. I thought it was high time to see the inside of it, and started up the tree. Before I had gotten halfway up all doubt about the nest being occupied was settled. The old bird would come at me like a bullet, and just sheer off at the last moment. She did not utter a sound during the charge. I found the nest all completed and lined and ready for the eggs. The nest is about 60 feet up in a white pine.

"I did not go near the nest again until April 2. Then I took a friend along with me who is an expert lineman and is interested in photography. It was a rather bad morning, snowing and several inches of snow on the ground in the mountains. When we came in sight of the nest all was quiet. I hit the tree with a stone, and the female at once left. Contrary to our expectations she refused to come back again, in marked contrast to her former behavior. Both old birds sat off in the big pines and called, but refused to come near. My friend went up and photographed the nest and eggs. There were three eggs. The nest was so big and wide that I gave up the notion of taking it along. The eggs were perfectly fresh.

"On April 20 I found the female sitting upon one of two old hawks' nests in the same neighborhood which had been used for several seasons by Redtails, and on May 20 I returned expecting to secure the young birds. To my surprise I found that the eggs had been destroyed, apparently by a Crow or Red Squirrel, and the nest deserted. The Goshawks, however, were still about, and I soon discovered that they had two fresh eggs in the other old nest, making the third set that they had laid this season.

"It was July 2nd before we again visited the spot prepared to capture the young which we felt sure were pretty well fledged by this time.

"All was quiet as we drew near the nest and we began to wonder whether some accident had happened again, when suddenly up among the limbs of the trees ahead of us the female bird appeared, and came straight at our heads with wings half closed, but making no sound.

"So close did she come that we instinctively ducked our heads. As she passed she screamed and was at once answered

by the male. We sat down in hopes that they would quiet down a little, but they remained very bold, screaming continually and alighting within thirty feet of us. We could see all markings plainly and noted the smaller size of the male and his weaker voice. Their cries resembled those of the Sharp-shinned Hawk, but were much louder. Sometimes they seemed to say 'get out, get out, get out.' My friend finally started up a tree whose trunk overhung the nest, taking a short stout stick along for defence, should the bird come too close. In spite of his demonstration with this weapon the female came several times within ten feet of his head. After photographing the young he drew up a long pole and pried them out of the nest, while I stood below to catch them and break their fall. One of them twice caught my hand in his claws, drawing the blood, but we got them home in a basket and shipped them to Mr. Thomas H. Jackson of West Chester, who studied them until full grown, and photographed them at various times. Eventually they were disposed of to the New York Zoological Garden.

"Under the tree we found many bones, which we examined carefully. Almost all were those of the Red Squirrel, which is very numerous in this region. There were also a few skulls and bones of Chipmunks but no remains of larger animals. Near by there are hundreds of acres of slashings and laurel thickets, where Cottontails and varying Hares are common and quite a number of Grouse occur, but there was no evidence of the Goshawks having killed any of them."



PHOTO. BY THOS. H. JACKSON.

YOUNG GOSHAWKS.