

resorted to, and in some seasons severe losses are experienced in spite of the expenditure of considerable ammunition and labor in bird minding. It is as an aid in this work that I wish to extol the virtues of the Marsh Hawk.

During the period of my stay (September 7-18) Marsh Hawks were plentiful, and Big Island, containing 130 acres of the rice on the Oaks Plantation, was a favorite hunting ground. Sometimes as many as eight or ten could be seen quartering back and forth over this island and the adjacent mainland. Five would seem to be a fair estimate of the average number of individuals present throughout all hours of daylight.

These birds kept the Redwings and Bobolinks in constant turmoil, the flocks taking wing whenever a Marsh Hawk approached. Though never seen to strike into such flocks, these birds of prey were always on the lookout for cripples, and in the course of the day appeared to secure a sufficient supply from those maimed by the bird minders.

Their constant flight back and forth served as an effective aid in the bird-patrol work, and, although they were indiscriminate in their wanderings, flushing the flocks from patches of wild growth as readily as from the cultivated rice, their work was more thorough than that of the human bird minder. Few, if any, Blackbirds or Bobolinks remained after one of these Hawks had passed. Two weeks' observation of their activities resulted in the conclusion that in general one Marsh Hawk was fully as effective an agent for crop protection as an individual bird minder armed with a shotgun. In this opinion I am supported by resident farmers, who hold the Marsh Hawk in almost universal esteem—a fact reflected in the common name that they give to it. The name, "Old Charley," as they apply it, reflects their conceptions of both reliability and faithful comradeship.

On the basis of five Marsh Hawks constantly present in the rice area of the Oaks Plantation, doing patrol work equivalent to that of five men armed with shotguns, it is not difficult to give monetary equivalents for this service. The cheapest colored labor of the section demanded \$2 a day. Without making allowance for the cost of ammunition shot by such minders, an item that might amount to several dollars a day for each man, it will be seen that the services of the Marsh Hawks on this one plantation can be conservatively estimated at \$10 a day. Including the periods of the "milk," "dough," and "harvest" stages of the crop, during all of which rice is subject to attack by either Bobolinks or Blackbirds, thirty days of useful service may be expected annually from the Marsh Hawks on the Oaks Plantation—service that could not be hired by the owner for less than \$300.—E. R. KALMBACH, *Biological Survey, Washington, D. C.*

An Autumn Hawk Flight.—On September 14, 1926, at 11:50 A.M. (standard) near the top of Mt. Monadnock, N. H., an extraordinary flight of Hawks was seen. A light breeze blew from the east, and overhead

extending in all directions to the horizon drifted masses of cumulus clouds with patches of blue sky between. Looking far out to the northwest two Hawks, perhaps a mile away, were seen wheeling over the valley at a slightly lower level than our point of observation. Then, as if from nowhere, other Hawks rapidly appeared, swooping, turning and soaring upwards in irregular steep spirals. More and more individuals appeared until the specks resembled a swarm of large insects, black against the pearl gray clouds. The total number was estimated to be between thirty and forty. Now they soared slowly, now flew with rapid wing beat at great speed. Each individual chose his own course without evidence of leadership. In from five to ten minutes (the exact time unfortunately was not noted) the flight had gained great altitude and to our astonishment the highest birds began to disappear in the clouds, some of them reappearing and again diving into the mist. Finally the whole flight had spiralled upward into the cloud mass and was lost to view. Once, half a minute later, a few specks wheeled out toward us and for a moment could be dimly seen through the edge of the cloud. That was the last glimpse.

Continuing to the top of the mountain we asked the forester stationed there his estimate of the height of the clouds, he thought them to be about 7,000 ft., for the top of Mt. Washington was clearly visible.

One of the interesting points about the flight was the speed with which it gained altitude—roughly 3,000 or 4,000 ft. in five or ten minutes. It seems probable that these Hawks were assembling for the migration and that, like a bombing squadron, they found it advantageous to rise above the cloud curtain before starting south. In fact as they circled upwards the whole flight was already moving in a southerly direction.

They must have been one of the larger Hawks, probably *Buteo*, though without field glasses we could not identify the species.—H. S. & H. B. FORBES, *Milton, Mass.*

Goshawks and Snowy Owls.—The present season is a remarkable one for the number of Goshawks (*Astur atricapillus*) and Snowy Owls (*Nyctea nyctea*) which have been killed along the Atlantic Coast from Canada south to Maryland. Three taxidermists in Maine are reported to have mounted upwards of one hundred Snowy Owls, and others have been brought into New York, Philadelphia and Washington. Two flew directly at some duck hunters in a skiff on the Chesapeake and were shot, while one or more have come onto ocean liners while still some distance off shore.

The Goshawks have been even more abundant and one gunner in northern New Jersey has personally handled over one hundred. This would seem to be the greatest flight of these birds for at least forty or fifty years.¹—WITMER STONE, *Academy of Natural Sciences, Philadelphia.*

Nesting of Short-eared Owl in Illinois.—The item contributed by Mr. Pierce Brodtkorb published among the "General Notes" in the July

¹ See end of "Notes and News", beyond.