

sixteen miles northwest of Ann Arbor, on November 27, 1920, by Earl Haynes.

**Picoides arcticus.** ARCTIC THREE-TOED WOODPECKER.—This is a very rare straggler from the north of Michigan and we have only one previous authentic record for this vicinity, October 18, 1884 by M. L. Eaton. A fine male was taken November 7, 1920, near South Lyon, Oakland County, by Fred L. Giddings and given to the museum collection. On December 6 three others were seen by Walter Hastings, also of South Lyon.

**Cryptoglaux acadica.** SAW-WHET OWL.—On January 1, 1921 a fine immature male was taken in a small tamarack swamp near Pleasant Lake, Freedom Township. This species is a rare visitant here in winter, and we have but one breeding record. The above specimen was donated to the museum by the collector, Mr. E. J. Lohr.

**Picoides americanus americanus.** AMERICAN THREE-TOED WOODPECKER.—On January 12, 1921 the Museum received a skin of the female of this species, taken by B. R. Twombly in Gogebic County in December, 1920. This constitutes the second record for the state. The first was taken at Sault Ste. Marie on October 1, 1901; and was mounted for the high school collection of the city by Professor C. E. Richmond. It may prove to be a rare resident of the Upper Peninsula.

**Astur atricapillus atricapillus.** AMERICAN GOSHAWK.—A fine specimen of this rare winter visitant was noted at South Lyon on January 17, 1921 by Mr. Walter E. Hastings.—NORMAN A. WOOD, *Museum of Zoology, University of Michigan, Ann Arbor, Mich.*

**The Song Periods of Individual Birds.**—During spring and summer of 1920, I started a study of the songs of individual birds, believing that the great difference that exists between the songs of individuals of the same species could be used as a means of tracing the movements of the individuals. This study brought many interesting results, most of which are too incomplete to publish at present. But one result was so unexpected, and has so important a bearing on certain ornithological work being done today, that I believe it should be brought to the attention of others as soon as possible.

The Biological Survey for some time has been collecting data on the numbers of breeding birds in the country, basing counts on the numbers of singing males during the height of the breeding season. In this work it is assumed that during the early morning hours every male bird is in song. No one, so far as I know has ever questioned that this assumption is correct, and I believe that I was one of the first to make it and to use it. ('Auk' XXXI, pp. 200-210). My work this summer has shown me, however, that with a number of species, and perhaps with the great majority, it is not true.

A species such as the Field Sparrow, for example, sings continuously from its arrival in April till the early days of August. This summer, with

a large number of individual Field Sparrows under observation, each distinguished by its location, and by the peculiarities of its song, I did not find a single individual that sang throughout the song period of the species. A great many ceased singing in the latter part of May and were not singing at all in June, in the height of the breeding season. This same condition obtained with the Meadowlark, Vesper Sparrow, Towhee, Yellowthroat and Wood Thrush, among species I had selected for study. In fact there was only one species, the Song Sparrow, of those I studied, where individuals did sing throughout the song period of the species.

From May to August I visited a certain wood almost daily. I found no less than seven male Wood Thrushes residing in that wood, each with its own special preference as to locality, and each with certain peculiarities in the phrases of its song that distinguished it from the others. I studied each song carefully and made graphic records of the phrases of the songs, so that I came to know each bird quite well. During this entire time I never heard more than three thrushes in song in this wood on the same day, even early in the morning. Anyone attempting a count of birds in this area, basing his count on singing males, unless he studied individual songs, would have counted but three pairs of Wood Thrushes.

These facts, if they are true of birds throughout the country, will make the bird counts underestimates so far as certain species are concerned. I suppose there are some who will be skeptical as to my ability to distinguish individual birds by peculiarities in their songs. While I am not ready to go into the detailed proofs and explanations of this work now, I would suggest to the doubter, that if he possess a musical ear, he try it himself. I am convinced that there is much to be learned by a detailed study of bird songs, and more students in this field would be welcome.—  
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**Convergent Habits in Fur Seals and Penguins.**—In reading Dr. G. Murray Levick's interesting book 'Antarctic Penguins,' I find it impossible to avoid frequent suggestions of parallelism in the habits of the Adelle Penguin and the Fur Seal. These may be of no particular significance but perhaps are of enough interest to be especially noted.

Like the seals, the penguins are amphibious, highly gregarious, and migratory. Unlike them, they are polygamous and this of course involves important differences in habits; but when these are taken into account, the resemblances are still numerous. As is well known, the Fur Seal comes to land only to breed during a short summer season, arriving after a long migration from its winter home in the open sea. The penguin does the same and, no less than the seal, follows its course with the precision of a mariner and his compass and arrives at its destination within a narrow time limit. The male seals precede the females and take up adjacent positions in their rookery and the females later come to them, the males fighting much with each other at this time. With penguins, the sexes arrive together, but unmated, and the female chooses a nesting spot and