

species. In such a case, we might expect to see them again, in large numbers. This would be analogous to what we see in insects, *Danais archippus* for instance.

The food supply has certainly become less. In this connection it is interesting to observe, that in the district where I have seen Wild Pigeons recently, there are some white oak trees and though they are mostly second growth, they succeed quite a forest of old oaks. There has, in this locality probably, been a continuous supply of mast. Mr. S. D. Woodruff of St. Catharines, Ont., writes, that he learned from sea captains that immense numbers of pigeons perished in the Gulf of Mexico, being exhausted by contrary winds and dense fogs. He says the experience of several ship masters was having "myriads of the pigeons alight on the vessel and rigging, and having to cast them off into the sea."—G. C. TREMAINE WARD, *Napance, Ont., Can.*

The Occurrence of the Ground Dove in Virginia.—While on a visit near Lynchburg, Campbell County, I flushed and killed a bird which upon examination proved to be this species (*Columbigallina passerina*). This is, I believe, the first instance of this kind occurring in this State. The bird was shot on November 4, 1900, and was a female in fine condition. It is now in the collection of Bertram Roberts of Washington, D. C.—PERCY W. SHUFELDT, *Washington, D. C.*

Rachitis in Young Red-shouldered Hawks.—May 26, 1900, Mr. A. H. Verrill informed me that he had that morning taken four downy young Red-shouldered Hawks (*Buteo lineatus*) from a nest near New Haven, wishing to raise them for photographic purposes. He fed them on butcher's meat, and they grew in size and weight, and juvenal plumage soon began to show. May 31 one was so weak that it was put to death, and the others seemed out-of-sorts, though gaining in size and plumage. They were unable to lift themselves to their feet, and seemed to suffer pain when handled. Their characteristic attitude was with the feet thrust forward. These symptoms increased and on June 11 two died.

In preparing them for specimens I found they showed well-marked evidence of rickets. Subcutaneous fat was present in large amounts, but the muscles were flabby and anæmic and the ligaments lax. The epiphysal cartilage was somewhat enlarged, the long bones deformed and unusually soft and flexible, and the tibiæ of both birds showed subperiosteal fractures at the point where the weight of the body would come when seated. Doubtless their attempts at standing aided in causing these fractures.

As Mr. Verrill and I were at this time collecting in western Connecticut, I suggested giving the surviving hawk bird-bodies as a change in diet, thinking that possibly these young birds had been unable to assimilate the lime necessary for calcification of the bones from meat alone. Under this treatment the surviving bird improved somewhat, but died on June 15, showing on dissection a condition similar to the others.