

migrating individuals of the species arrived and we have noted a similar hiatus between the departure of wintering Myrtle Warblers and the appearance of spring migrants.—CHARLES F. WALKER, *The Ohio State Museum, Columbus, Ohio.*

Bird Migration at Guatemala City, Guatemala.—At 7 P.M. on the evening of September 19, 1927, (Guatemala time) we had, after a calm afternoon, a typical rainy season thunder storm with exceedingly violent showers. The thunder storm abating, the sky remained very cloudy and there was a drizzling rain all through the night until about 5 o'clock the following morning, interrupted by violent showers and short stops. The night seemed calm but the drifting clouds indicated movements in the upper air.

About 8 P. M. I heard, from the dark sky, bird calls: soft whistles like *gi, gi, gi*, (as i in give) or *di, di, di*, or hoarse monosyllables like *ca*. I finally saw about sixty birds the size of a small Heron circling over the city. About 11 P.M. the cries increased and I realized that the city of Guatemala was witnessing the splendid phenomenon of a night migration such as I had seen at Heligoland during several residences there.

I watched the flight until 2:30 A.M. and up to that time could detect no decrease in the flight although there was a constant variation in the intensity of the calls, they being more numerous during cessations in the rainfall. I heard the following calls which I give in the order of their frequency.

1. *gi, gi, gi*, (i, as in give) or *dudu, dudu*. Soft whistling calls certainly made by a *Totanus* like those of *T. totanus* in Heligoland. These callers seemed to always pass in little groups of three to five individuals. The number of calls per minute ranged from 5 to 40.

2. *ka, ya, yak, kyak*, (like a in car). Separate, deep, loud, rattling calls sometimes exactly recalling *Corvus monedula* of Europe. The birds passed at a moderate altitude over the city in groups of 80, 60, 20, 18, 15, and 5 individuals. I calculated that at one time there were at least 500 flying over the lights of the city.

3. *tsik*, a high loud tone from a moderate altitude. About the same number of calls throughout the night.

4. *tsirr*, frequently repeated at short intervals. Resembled the call of a flying *Delichon urbica* (European Martin) the call seemed so close that I thought I would be able to see the bird but I could not.

5. *pit* exactly like the short migrating note of a European Song Thrush (*Turdus musicus*).

7. *tse, tse*, (like e in bed).

8. *tsee, tsee*, or *fee, fee*, (like ee in free). Clearly two syllables, loud and clear.

9. *héedee, héedee*, (like ee in free). Loud, high and penetrating whistles like the voice of the European Sandpiper (*Actitis hypoleucos*). The whistles were from a considerable altitude and not more than five to a minute as if single birds were passing over quickly.

10. *sisisi* (like *i* in *give*). Very high and soft like the voice of the Kinglet (*Regulus regulus*).

11. *way*. Deep and not striking.

12. *tserrrr*. Heard but rarely.

The number of species probably amounted to a dozen chiefly Shore birds and little birds. That the latter made up most of the migration was also proven by observations made the next morning when I not only saw northern little birds for the first time this year but the gardens of the city were full of little greenish and yellow breasted birds (Mniotiltidae) which were also slipping through the underbrush and picking little insects from the branches.

I inferred that these migrants had started at dusk from a station far to the north and flying into the thunder storm lost their way and were attracted by the lights of the city and came to rest to await the dawn. The confused flight of the Heron-like birds that I saw and the coming and going of the calls during the night also indicated great confusion among the migrants.

The night of September 20, was not rainy and only a little cloudy from time to time and I heard only a few single voices chiefly the *gi, gi, gi*. It is quite likely that on this night also there was a large migration but on account of the more favorable atmospheric conditions there was no congestion and confusion. Such is the case on starlight nights at Heligoland. On the morning of the 21st, moreover, all the northern little birds had disappeared from the gardens.—FRITZ HEILFURTH, *Colegio Aleman, Guatemala City, Guatemala*.

A Method of Blowing Eggs.—About twenty years or more ago, the late Fred B. McKechnie brought to my attention a simple and effective method of "blowing" eggs, which I have used very successfully ever since, when not actually in the field; and which seems never to have been adopted by egg collectors in general. This is the more remarkable because Mr. E. E. Brewster in 'The Auk' for 1895, pp. 196–198 describes almost exactly the same process. My apparatus is, however, much simpler, although Brewster's water flask has the advantage of preventing the occasional clogging of the aspirator. At the risk of some duplication it seems worth while to present an account of my apparatus.

It consists merely of the adaptation and utilization of the Aspirator or Filter Pump, (there are several makes, but I use Chapman's No. 6118), common in every chemist's laboratory, the egg being *sucked* comparatively quickly and effectively by hydraulic power, instead of blown laboriously by lung power, and often with grave danger to the shell.

The Filter Pump *A*, in the plate, and the connection *B* for attaching it to a cold water faucet, may be purchased at any chemist's supply house. These connections are made to attach either to a smooth faucet, or one with a hydrant thread; and the rubber hose *C* may be purchased there likewise. This hose, of convenient length, should be supple, but stout