In the crop of the Cuckoo we found a large grasshopper of a kind that was very abundant on the Mesa. This suggested a possible explanation for the occurence of the Mangrove Cuckoo in such an unusual habitat, namely, that the birds had moved up from the coast along the moist valley of the Rio Guayalejo and then had found on the near-by mesa an abundant supply of food.—STEPHEN W. EATON and ERNEST P. EDWARDS, *Laboratory of Ornithology, Cornell University, Ithaca, New York.*

Barred Owl thirty miles from land.—I am indebted to John B. Metzenberg, of Chicago, for the following report of a Barred Owl (*Strix varia*) observed over Lake Michigan during daylight hours.

On August 22, 1946, while sailing his 46-foot schooner northward on Lake Michigan, Mr. Metzenberg and a crew of four associates sighted a Barred Owl flying just above the waves in the vicinity of their boat. When first noticed at 8:00 a.m., the owl was near mid-lake, approximately 30 miles west of Pentwater, Michigan, and about 35 miles east of Sheboygan, Wisconsin. A moderate northwesterly breeze, estimated at 8 to 10 miles per hour, was blowing at the time and had not varied during the previous 36 hours. Visibility was good, although a light overcast somewhat obscured the sun.

The owl made repeated attempts to perch on the swaying 49-foot mainmast before finally succeeding. Later it perched, more comfortably, on the "spreader," only 20 feet above the deck, and on the shrouds. The proximity and activity of several men on deck held the owl's attention, but apparently caused the bird no great anxiety. At intervals of 10 to 15 minutes it left the boat briefly and flew aimlessly over the lake, occasionally disappearing in the distance. The owl returned to the boat repeatedly over a two hour period to resume one of its earlier perches, but finally disappeared to the eastward at 10:00 a.m. and was not seen again.—EMMET R. BLAKE, *Chicago Natural History Museum, Chicago, Illinois.*

Status of the Anna Hummingbird in southern Arizona.—In 1941, Gale Monson and I reported briefly (*Condor,* 43:108–112) on the principal findings of several short trips in southern Arizona. We considered an Anna Hummingbird (*Calypte anna*) taken at Patagonia, Arizona, December 3, 1939, "a late fall transient," and stated that there were no published winter records for southern Arizona. Later, Godfrey (1944. *Auk,* 61:149–150) reported a December 24 specimen from Yuma as a "winter" record; and van Rossem (1945. *Condor,* 47:79–80), summarizing data available to him, implied that we had overlooked Willett's records for Roosevelt Lake (though this is a *central* Arizona locality). It seems desirable, therefore, to present a full account of our views on the migration of this hummingbird.

Since 1938, Mr. and Mrs. William X. Foerster and I have kept records of birds seen about Tucson. Tree tobacco (*Nicotiana glauca*) and other shrubs were planted in our yard late in 1937; the tobacco blossomed well until 1942, and it proved a definite attraction to hummingbirds. Among these, the Anna proved to be a regular visitor in fall, often remaining until late December. Our records were as follows:

	No. of records	Last record
1938	3–4	Nov. 25
1939	8	Dec. 20
1940	2–3	?Dec. 28
1941	26	Jan. 8, 1942
1942	9	?Jan. 21, 1943
1943	4	?Dec. 15
1944	1 (Dec. 27)	

By 1945 Annas had been found to occur so regularly that, although six or eight were seen, only one (November 21) was recorded in our notes. Our earliest seasonal record (of a female) was September 24 (1941), and as shown above the species lingers regularly to late December and occasionally into January, at least to January 8. There is no question, however, that most of the birds depart by the end of December.

To what extent visits to our yard by the same bird on different days may have increased our totals above the actual number of birds present, I cannot tell. The maximum seen in the yard at one time was two birds. The large total in the fall of 1941 was probably due in considerable part to a female that roosted in the hedge up to October 25 and which attracted at least one male at times, "courtship" flight being observed in October. On the other hand, collecting of three adult females in the first half of November 1939 did not end the visits of the species that fall. These three specimens were judged, from the appearance of their ovaries, to be more than a year old. Though adult males also constitute a part of the Anna Hummingbird population of southern Arizona, females and young seem to be in the majority.

In addition to those seen in our yard, Anna Hummingbirds have been seen in other parts of the Tucson Valley and on the south slope of the Santa Catalina Mountains. Further observation may show the species to be more common in the oaks of the mountains than in the valleys, and to remain in small numbers in warm, south-facing canyons in the foothills through the winter. But I regard two facts as well established: 1. The Anna Hummingbird is the latest of all the transient hummingbirds to appear in Arizona and is the only hummingbird occurring regularly in the Tucson Valley after early October. 2. The bulk of the Annas leave the valley by the end of December. Their departure may be correlated with the cold mid-winter nights, when the tree tobacco finally ceases to bloom (in this valley, it usually blooms from late February or early March to late December).

Where, then, do the bulk of the Anna Hummingbirds of southeastern Arizona go in December? There is no evidence that they continue farther east or south; the one record for Texas (Brewster County) is in October (Van Tyne and Sutton, 1937. *Univ. Mich. Mus. Zool. Misc. Publ.,* 37:44). Willett (1915. *Condor,* 17:102) has shown that Annas winter farther north, in the low valleys of central Arizona, but I suspect that they will prove to be just as common there in October as in January. If so, the southeastern Arizona birds must go west. But in the deserts of southwestern Arizona and southeastern California, the common winter hummingbird seems to be the Costa (*Calypte costae*). My belief is that the bulk of the Anna Hummingbirds of southern Arizona return in December *to their breeding grounds,* which are relatively warm and moist in winter. The height of the nesting season is in February and March, but incubated eggs have been taken by late December (Willett, 1933. *Pac. Coast Avif.,* 21:97). Comments on its abundance in southwestern California cover nearly every month except October and November, when the Arizona population is at its maximum; it would be interesting to know whether a measurable decrease occurs at that time in California.

It is also noteworthy that there is no evidence of a return flight in spring in southern Arizona. As to fall arrival, the earliest authentic record seems to be September 4 (Sacaton, Arizona), all alleged August specimens I have examined being either immature *Archilochus alexandri* or of questionable date. Normal occurrence in southern Arizona seems definitely to be from late September to late December only.

Seasonally, then, we cannot term the Anna Hummingbird a "winter" bird in southern Arizona; yet biologically it certainly *is* a winter resident, migrating here

from its breeding grounds, spending some time, and then returning. The best term for such an unorthodox migrant would seem to be "autumn visitant."

For the privilege of examining specimens and notes, I am indebted to L. C. Sanford, Gale Monson, E. C. Jacot, Randolph Jenks, Mr. and Mrs. Hugh P. Dearing, Mr. and Mrs. William X. Foerster, Mr. and Mrs. Ross J. Thornburg, and the authorities of the American Museum of Natural History, the United States National Museum, and the U. S. Fish and Wildlife Service.—ALLAN R. PHILLIPS, *Museum of Northern Arizona, Flagstaff, Arizona.*

Air speed of Belted Kingfisher.—In the spring of 1946 while travelling in central Colorado, a companion and I recorded the speed of a Belted Kingfisher (*Ceryle alcyon*) as it flew for a distance along U. S. Route 50 in the Arkansas River Canyon between Canon City and Salida. For several miles the canyon walls are very precipitous, rising a thousand feet or more from the stream bed. Passing through this, the deepest part of the canyon, where the road is separated by only a few feet from the river, we noticed a Belted Kingfisher flying upstream in a course parallel to our car. We were travelling at 30 miles per hour when the bird, flying with apparent ease, came in range of our vision from behind. To keep pace with the bird we increased our speed to 35 and then to 40 miles per hour. At this speed we stayed abreast of the bird for 1.8 miles before it again drew ahead of the car. We increased our speed to 45 miles per hour and were thus able to follow it 0.4 mile farther, when we were forced to reduce speed because of a rock slide partially blocking the highway, and the Kingfisher was lost to view. I estimated that the Kingfisher had been flying with a wind velocity of one to three miles per hour to assist him.

In all, we had successfully followed this bird for a total distance of 2.2 miles from the point of first observation. At no time had the distance between us and the bird been greater than 10 or 12 yards. In order to maintain this distance it had been necessary for us to increase our speed from 30 to 40 and finally to 45 miles per hour. D. D. McLean (1930. *Gull*, 12, No. 3: [p. 2]) recorded "steady level flight" of 36 miles per hour for the Belted Kingfisher (in California). All during our observation the Kingfisher flew with apparent ease and remained between 10 and 15 feet above the water's surface, following each curve and bend of the river consistently. It showed no alarm or anxiety because of the nearness of the automobile. Observation and alertness, however, were evident in the continual turning of its head from side to side during the flight.—LEE J. BURLAND, *138½ River Street, Oneonta, New York.*

Purple Martins feeding on emerging may-flies.—On the evening of August 2, 1946, I observed at Shafer Lake, White County, Indiana, what I at first supposed was a large feeding school of white bass (*Lepibema chrysops*) about a third of a mile from my boat. (These bass travel about open water in schools and in the summer months feed at the surface, making splashes that can be seen from a considerable distance.) On closer approach, however, I found that the splashes I had observed were being made by Purple Martins (*Progne subis*) and a smaller species of swallow (either Bank or Rough-winged) which were feeding on may-flies (Ephemeroptera) that were coming to the surface to molt. This emergence was taking place along the east shore of the lake for about 1,000 yards and out into the lake for perhaps 400 yards. Often the birds picked the insects from the water, making hardly a splash. Almost as often, however, they made a large splash, sometimes almost disappearing beneath the water. The flies actually on