wing stretch movement (Eibl-Eibesfeldt and Kramer, Quart. Rev. Biol., **33**: 181–211, 1958). Woodpeckers do this in an atypical manner. All of my captive individuals stretch one wing way down without any movement of either foot. One has to be in a favorable position to see this clearly. It is more difficult to observe in the field, but on one occasion I watched a Pileated Woodpecker do a wing stretch while both of its feet were clamped widely apart on a tree trunk. It remained in view during the extreme downward movement of the wing. Koenig has photographed a Bee-eater (*Merops apiaster*) wing-stretching in this manner (Nature Stories from the Vienna Woods. Crowell. New York. 1958).—LAWRENCE KILHAM, *7815 Aberdeen Road, Bethesda 14, Maryland.*

Ash-throated Flycatcher in Alabama.—S. W. Simon (Auk, **75**: 469, 1958) summarizes the records of the Ash-throated Flycatcher (*Myiarchus cinerascens*) east of the Mississippi River in the United States—seven specimens and two sight records are listed. To this growing list I would add a specimen I collected November 2, 1958 at Dauphin Island, Alabama. The specimen was identified at the Louisiana State University Museum of Natural History by Dr. Robert J. Newman as *Myiarchus cinerascens cinerascens.* The specimen is now No. 4645.la in the Florida State University bird collection. This is the first record of the species in Alabama (Thomas A. Imhof, personal communication).—LOVETT E. WILLIAMS, JR., *Wildlife Research Unit, A.P.I., Auburn, Alabama.*

New Record of the Eastern Barn Swallow in Micronesia.—The Eastern Barn Swallow (*Hirundo rustica gutturalis*), which normally winters as far south as Australia, has been reported as a fall and winter migrant in western Micronesia by several observers. (Baker, Smithsonian Misc. Coll., **107**: 65, 1948) reported swallows of this Asiatic subspecies in the Palau Islands, Western Carolines, in September, 1945 and on Guam, Marianas Islands, in October. Strophlet (Auk, **63**: 535, 1946) saw birds on Guam in late October and November. Marshall (Condor, **51**: 221, 1949) reported immature Barn Swallows from Saipan, Tinian in the Marianas and from the Palaus between October and February. These birds are apparently regular winter visitors to the Marianas and Western Carolines. No observations of Barn Swallows in the central or eastern Caroline Island archipelago have been recorded.

On the Island of Moen, Truk Atoll (7° N. Lat., 152° E. Long.), in the eastern Carolines, some 560 nautical miles southeast of Guam and 1040 nautical miles east of Palau, eleven Barn Swallows were observed on December 30 and 31, 1957. The birds were seen perched on electric wires on the northwest tip of the island, and were noted catching insects in flight, in company with Caroline Swiftlets (*Collocalia inquieta rukensis*). They remained near a flat marshy area covered by heavy growth of *Phragmites karka.* A bird collected on January 1, 1958 proved to be a young male with much subcutaneous fat. Testes measured 3.5 mm. It is now #570101-0101 in the collection of the Pacific Island Central School. On December 11, 1958, six Swallows were again observed in the same area. The birds remained on Truk for about one week.—JOHN H. BRANDT, *Truk, East Caroline Islands.*

South American migrant swallows of the genus *Progne* in Panama and northern South America; with comments on their identification and molt. —More birds of the Temperate Zone of South America migrate across the Equator than has been supposed (*cf.* Zimmer, Auk, **55**: 405–410, 1938). This is true of the

swallows, and probably of the swifts. The Argentine race of the Brown-chested Martin, *Phaeoprogne tapera fusca*, has proved to be a regular and abundant migrant to Panama (Eisenmann, Auk, **72**: 427, 1955), and the Patagonian Blue-and-white Swallow, *Atticora (Pygochelidon) cyanoleuca patagonica*, taken repeatedly in Panama, has recently been recorded in Nicaragua (Howell, Condor, **57**: 188, 1955) and Mexico (Paynter and Alvarez del Toro, Condor, **59**: 268, 1957). The migratory southern subspecies of the Ashy-tailed Swift, *Chaetura andrei meridionalis*, has been collected in northern Colombia and Panama in August, the height of the Southern Hemisphere winter (Darlington, Bull. Mus. Comp. Zool., **72**: 392, 1931; Rogers, Auk, **56**: 82, 1939), and I suspect that other little known South American swifts recorded from Panama and southern Central America during this season (*e.g.*, the White-chinned Swift, *Cypseloides cryptus*) may prove to be migrants (*cf.* Beebe, Zoologica, **32**: 167, 1947). Northern records of two other southern hemisphere migrants, the Southern Martin, *Progne modesta elegans*, and the Gray-breasted Martin, *Progne chalybea domestica*, are here reported. In connection with their identification it was found that stage of molt was a useful clue in distinguishing trans-equatorial migrants from north and south.

Progne modesta elegans. A Southern Martin was taken by H. Wedel on July 14, 1931, on the Caribbean coast of eastern Panama (near the Colombian boundary) at Obaldía (= Puerto Obaldía), Lat. 8° 40′ N. The specimen (Univ. Mich. Mus. Zool. no. 97608), labelled "♀ o.n.e.", has a few fresh purple feathers on the breast, sides, and under tail-coverts, suggesting an immature male. Measurements: wing (flat), 134 mm.; tail, 71 mm. The bird is in the same plumage, and in the identical stage of wear and molt (with three old pairs of outer primaries and two of rectrices), as various immatures taken on July 15, 1929 at Tahuapunto, Rio Uaupés, Brazil, just north of the Equator (reported in Zimmer's review of the genus, Amer. Mus. Novit., no. 1723: 8, 1955)—hitherto the most northerly records of this migratory form.

The reported breeding range of *elegans* is western and central Argentina south to northeastern Patagonia and north to the highlands of eastern Bolivia. In Argentina the first birds apparently arrive towards the end of August, and most have left by the end of March (see Wetmore, U.S. Natl. Mus. Bull., **133**: 347, 1926; W. H. Partridge, *in litt.*). The full extent of the winter quarters remains uncertain, but there is a large series in the American Museum of Natural History taken in the western Amazon basin of Brazil and Peru between May 6 and September 1, 1929 (Zimmer, 1955, *loc. cit.*). Farther north wintering *elegans* may well have been overlooked because of resemblance to other species of *Progne*. The adult male, in its over-all steel blue color, is a counterpart of the North American Purple Martin, *P. subis*, which also winters chiefly in Brazil; other plumages, though quite distinctive, bear some likeness to those of both *subis* and the resident tropical *chalybea*. Both migrant *subis* and *elegans*, though arriving at opposite seasons, may well occur in the same tropical localities as transients or winter residents during March and April and from the end of July into September. Thus specimens of *P. s. subis* have been examined taken near Colón, Panama on the southward migration as early as August 3 and 5 (coll. by J. E. Ambrose, Jr.) and taken in Venezuela on August 28. Though the return migration has been observed in Panama by February (Wetmore, Smith. Misc. Coll., **139**, no. 2: 13, 1959), there are specimens of *subis* (in the American Museum) taken as late as April 1 and 2 in Brazil and April 4 and 18 in Venezuela.

Identification. Females and immature of *elegans* have dark sooty-brown underparts, the feathers with narrow pale brownish margins, often obsolescent on throat and breast, wider and more whitish on the lower abdomen. *Elegans* thus looks entirely dark below, relieved only by whitish "scaling". In corresponding plumages of both *subis* and *chalybea* the abdomen and under tail-coverts are normally white, more or less marked with dusky *streaks,* which are usually very fine shaft-streaks in *chalybea,* but are often broader in *subis.* Sometimes in *P. s. subis* the under tail coverts may be dusky, edged with white; and very exceptionally the underparts may so suffused with sooty-gray as to suggest the pattern of *elegans,* but with shaft-streaks still apparent and a gray patch on each side of the neck, which may meet in a narrow ring across the hind-neck. *Adult males* of *elegans* may be distinguished in the hand from *subis* by longer tail and deeper tail fork (25 mm. or more), and by lacking the small concealed white flank patch (while retaining the adjacent patch on the sides of the lower back). These points are hard to determine in molting birds, and during the periods when these two species may occur together they are likely to be molting. Fortunately *subis* and *elegans* begin and end the molt at opposite times of the year—in phase with their antipodal breeding seasons. Dated specimens can usually be distinguished readily by stage of wear and molt. In these highly migratory and aerial birds the molt of primaries is remarkably protracted (requiring probably five and possibly six months), and the contrast between worn brown remiges and glossy fresh ones is obvious in specimens. For example, in August and September adult *subis* has begun to molt, but is unlikely to have replaced more than two to four inner primaries, while adult *elegans* is likely to have completed (or almost completed) the wing molt. In March and April the opposite situation prevails. Birds of the year begin and end the primary molt a month or more later than older birds.

Progne chalybea domestica. To the larger migratory southern race of the Gray-breasted Martin, I would allocate three specimens in the American Museum (Nos. 433492, 435045, 435047)—the first to be reported north of the Equator. They were collected by the Olalla Bros. in 1929: a male at El Merey, Río Casiquiare, Venezuela (about 3° N. lat.), on April 18; and two females at Tahuapunto, Rio Uaupés, Brazil, on July 15. Although *domestica* is said to leave its Argentine breeding grounds by March (gathering in flocks with *elegans*) and to begin to reappear in late August, the most northern record has hitherto been of seven taken in September, just south of the Equator, at Yucabí, upper Rio Negro, Brazil (Zimmer, 1955, *op. cit.:* 2), a locality where the same collector on the same date also took the breeding form, nominate *chalybea.* The three more northern specimens, here considered *domestica,* Zimmer (*op. cit.*) included under *chalybea.* He apparently was disinclined to attribute to the migrant form specimens found in the range of the tropical race, unless exceptionally large in both tail and wing.

The subspecies *domestica* breeds over northeastern Argentina, adjacent Paraguay and eastern Bolivia, north to central and southeastern Brazil, where it apparently intergrades with the smaller tropical *chalybea.* Based on a sample series from the undoubted breeding range of each, Zimmer (*op. cit.:* 1–2) found the following size differences. *P. c. chalybea:* males—wing, 124–138 (131.7), tail, 58–66 (62.5); females—wing, 121–132 (130), tail, 54–65 (61). *P. c. domestica:* males—wing, 137–144 (141.2), tail, 70–77 (73.2); females—wing, 135–142 (139), tail, 70–80 (74). In *domestica* adults tend to be paler on the throat and breast, and immatures to have more conspicuous pale edgings on the brown breast; but these characters sometimes appear in *chalybea.* The male from El Merey, Venezuela, though immature, agrees with the larger southern race, both in color and in measurements; wing,

141, tail, 70; in fact the label in Zimmer's handwriting identifies it as *domestica*. This bird (gonads marked small) shows molt just begun, having dropped the innermost primary—as one would expect in April of a southern migrant bird of the year. The listing as *chalybea* in Zimmer's paper may have resulted from confusion with another example (wing, 130; tail, 62) from the same locality, taken on the following day, undoubtedly nominate *chalybea*. That is an adult female labelled as having enlarged ovary (as might be expected in April of the population breeding at 3° N. latitude), and has just completed the wing molt (the sheath of the outermost primary still visible). The two females from Tahuapunto, Brazil, show the mottled breast usual in young *domestica* and satisfy Zimmer's criteria in wing length (136, 140). Their short tails (64, 65) are explained by their being birds of the year in full molt, with the longest remiges and rectrices very worn (the tips broken off in one specimen), and with all except the two outer pairs of primaries and rectrices replaced. Zimmer's sample series of *domestica* from the breeding grounds consisted of adults. In *Progne* birds of the year have shorter tails. Thus, in the American Museum series of *elegans*, which is a longer-tailed form than *domestica*, several of the immatures, taken as migrants at Tahuapunto on the same date and place, have tails measuring only between 63–65. These birds are in a stage of molt and wear like that of the two *domestica*. While we do not know the molt regimen of such martins as may breed about Tahuapunto, this agreement of the two specimens with the admittedly migratory *elegans* suggests that they also are migrants.

K. H. Voous ("The Birds of Aruba, Curaçao, and Bonaire", p. 207, Martinus Nijhoff, The Hague, 1957) has pointed out that three out of four *Progne chalybea* taken in Curaçao (where this species does not breed) are pale-throated and may meet Zimmer's mensural criteria for *domestica*, but he tentatively preferred to list them as nominate *chalybea*, which breeds on the adjacent Venezuelan mainland. Dr. Voous has kindly advised me that only one of the Curaçao birds is in his possession, and his notes do not indicate that any was molting primaries or rectrices. The two largest birds (wing, 147.5, 145) were adults taken on October 6, 1955; that they should not be molting is what one would expect of *domestica*.

Relation of breeding and molt cycles in Progne: The information available on breeding season and the examination of over two hundred specimens of *P. chalybea*, ranging from Mexico to northern Argentina, indicate that in tropical latitudes north and south of the Equator breeding and molt occur at opposite times of the year, corresponding in general with the seasons of the adjacent temperate zone. In the more sedentary tropical populations of *P. chalybea* the breeding season may be longer than that of the northern *subis* or the southern *elegans*, and the molt of individual birds may possibly progress faster. For populations of *P. chalybea* very close to the Equator (two or three degrees) the molt and breeding relation is unclear, as few specimens bear significant gonadal data. At these low latitudes, as Miller has reported (Acta XI Cong. Int. Ornith. Basel 1954: 495–503, 1955), certain passerines have, and others have not, a definite breeding season, and even at higher tropical latitudes some passerines may molt while nesting—contrary to the usual situation in the temperate zones. Since reproduction and molt have different endocrine bases (Assenmacher, Alauda, **26**: 251–265, 1958), a correlation adaptively useful in areas of marked seasonal change may conceivably be absent elsewhere, even in the same species. Thus on the Galapagos Archipelago, straddling the Equator, the sedentary endemic *P. m. modesta* (currently regarded as conspecific with the migratory *elegans*) breeds while actively molting. Beebe reported finding six nests in March on Indefatigable Island, just south of the

Equator ("Galapagos: World's End", p. 93. G. P. Putnam's Sons, 1924). Of 30 Galapagos specimens examined in the American Museum, all those (14) taken between late February (molt begun) and May (molt incomplete) were replacing primaries; seven March, 1935 specimens (with from four to six fresh or sprouting primaries) bear labels, in J. P. Chapin's handwriting, showing enlarged gonads, two with brood spot and enlarged oviduct (one with two empty ovarian follicles), indicating recent egg-laying. (October and November specimens from the Galapagos are not molting, except for an immature; none carry gonadal indication.) Molting when breeding has not been noted in *P. chalybea*, but the possibility that this may occur near the Equator must be kept in mind in using molt and gonadal condition as clues to subspecific identification.

In this paper *P. subis* has been used in the sense of the A.O.U. Check-list (1957), and not in the broader sense of the "Distributional Check-list of the Birds of Mexico," pt. 2: 107 (1957), because the West Indian *cryptoleuca* and *dominicensis* and the west Mexican *sinaloae* seem to me at least as closely allied to *P. chalybea* as to *P. subis* (see Zimmer, 1955, *op. cit.*: 2–4). Though all forms of *Progne* are geographical representatives, the likelihood of some breeding overlap in Mexico and Argentina justifies the present maintenance of several species (Zimmer, *loc. cit.*; Hellmayr, Field Mus. Nat. Hist., Zool. Ser., **13**, pt. 8: 21, 23–24, 1935). In treating *elegans* as a subspecies of *P. modesta* Hellmayr and Zimmer are followed, with some hesitation; the English name selected is intended for the entire *P. modesta* complex. I am indebted to Dr. R. S. Storer for sending the Panama specimen of *elegans* for identification.—E. EISENMANN, *American Museum of Natural History, New York 24, N. Y.*

Blue Jays Attack a Red Bat.—Although the Blue Jay's habit of pestering hawks and owls and of frequently attacking other birds is commonly observed, assaults on bats may be rare. The following incident may therefore be worth recording.

During the noon hour of July 3, 1958, Mr. R. L. Browning, a student, came to my office to inquire whether anyone in the Biology Department might be interested in an observation which he and his wife had just made. While sitting under a tree on the University of Louisville campus they had become aware of a commotion overhead which involved a small group of screaming Blue Jays, *Cyanocitta cristata*. A bat then flew from the tree, followed by the attacking jays, and came to earth a few yards away. At the approach of the Brownings the jays departed while the bat remained motionless on the ground.

The three of us then went immediately to the scene of the encounter, where we located a Red Bat, *Lasiurus borealis* (Müller), in the grass. When picked up it made no attempt to fly but it was able to bite. The only visible evidence of injury was a small abrasion on one side of the abdomen. By the following day it showed no signs of distress.—WILLIAM M. CLAY, *Department of Biology, University of Louisville, Louisville 8, Kentucky.*

Large Numbers of Bohemian Waxwings in New Mexico.—During the month of April, 1959, large numbers of Bohemian Waxwings *(Bombycilla garrulus)* were seen in Santa Fe, New Mexico by myself and other observers. The invasion of these birds began April 5 and lasted approximately one month. The last ones I saw were three on May 12. During the month at least 5,000, and possibly as many as 10,000, were present in the area. I saw hundreds in my garden on numerous occasions. As an indication of the great numbers of the birds, on April 13, a large