

ever raises it to an erect position." The Wakon "is nearly the size of a swallow." The Whetsaw is listed too. It "is of the cuckoo kind . . . scarcely ever seen." Its note, like the filing of a saw, is heard in the groves during summer.

Paroquets, we are told, "are plenty in West-Tennessee chiefly in the neighborhood of salt licks," while an interesting ecological note occurs in the seeming increase of Quails or Partridges with the advance of civilization, and in the record of an Indian proverb, when they found a swarm of bees in the forest, "Well, brothers, it is time for us to decamp, for the white people are coming." Morse's naive record of the Wakon serves to remind us how few mythical birds of the Indians survived in popular lore, although the horn snake, the hoop or hump snake, and the joint snake, each perhaps tracing back to Cherokee mythology, seem almost ineradicable among certain white beliefs.

Imported European lore regarding birds has survived better. Lapwing, Milhatch, Parvee, Skirk, Swint, Lonegar, and Tontil are unscientific bird names picked up in the South. The Nightingale, the Swamp Robin, the Swamp Angel, and the Sonnet Thrash, with perhaps the Knight appear to refer to the Wood-thrush, but many even fairly well educated people do not distinguish between the Wood Thrush and the Brown Thrasher! Whether Parvee is an imitation of a bird note or a corruption of *parvus* can only be guessed. *Skirk*, however, is a medieval English word for shriek and may refer to the Shrike. This word is not found in one of the most exhaustive dictionaries published in England, so obsolete is it! *Swint* calls to mind Chaucer's *sweynt*, meaning "wearied," or *swind*, to waste away. More probably the obsolete *swen* for swallow represents the origin of this term that reappears in America, and it is probably related to *swim* and *swimble* the latter meaning to feel dizzy and perhaps to stagger. The *Lonegar* suggests the giant roc-like *Tlanuwa egwa* of Cherokee mythology, but a more probable source would seem to be "Lone Egar" the last word meaning *wander* or *stray* and in good use in the late sixteenth century English, so indicating some bird of solitary habit. *Milhatch* cannot be placed; it suggests English, but might be a corrupted Creek word. Such vernacular words, bandied about by the inaccurate one often cannot place on any specific form. Even the "Poor Job" so definitely placed by Bartram, may be a much broader term in the "Poor Joe" of the modern natives of the Carolina swamps. *Tontil* is apparently an unforgiveably slovenly rendering of "Tomtit" but may have arisen quite respectably from nasalizing the m and suppressing the d of the English Tom Tiddler used in children's games.—A. L. AND BELLE M. PICKENS, *Greenville, S. C.*

Intergradations of Life Zones and Sub-species in the Southern Piedmont.—By far the greater part of South Carolina is, paradoxically not Carolinian, but Louisianian as to life zone alignment. The Carolinian, is a very narrow fringe along the northerly boundaries of Oconee, Pickens and Greenville counties; in the area below neither zone is prominent.

In the upper Piedmont the lack of truly diagnostic forms amounts at times to a hiatus. We have here a sort of biological melting-pot. Recent measurements on a Barred Owl placed it nearer *Strix varia varia* but the partially naked toes seemed to indicate a leaning toward *alleni*. Others, on an example of Great Crested Flycatcher, placed it nearer *Myiarchus crinitus boreus* but here also was manifest an intergrading with the more southern variety. Meadowlarks in summer were once unknown here; now slightly smaller and darker birds are invading the region, plainly from the south, and a bird taken in the spring by Mr. C. J. Moody I assign to *Sturnella magna argutula* but it is too much of an intergrade to be declared pure. Reports of nesting Meadowlarks and Grackles first came from the lower Piedmont, then from the upper, being first taken in both cases for the more northerly forms, apparently with an odd hiatus in their distribution. This the sub-species extension filled, not from the north but from the south, *Quiscalus quiscula aglaeus* now being reported by Thos. D. Burleigh from Anderson county (The Auk, LI: 1, p. 90). An incoming from the mountain side is also noticed. The Eastern Phoebe (*Sayornis phoebe*) is building under bridges for the past two or three years within the city limits of Greenville, even before exclamations of surprise over the earlier invasion of Southern Robins (*Turdus migratorius achrusterus*) were stilled. Further up among the mountains the Bank Swallow (*Riparia riparia riparia*) has at last dropped across the state line, attracted perhaps by the huge vertical sand cliffs left in building the earth dam of the Table Rock reservoir. The Eastern Song Sparrow (*Melospiza melodia melodia*) is now common in summer in the lower mountains, but while our Blue Jays remain dominantly northern a specimen recently examined for the local Parker Schools Museum proved to be *Cyanocitta cristata florincola*.—A. L. PICKENS, Greenville, S. C.

Bird Mortality on the Highways.—The following list of 353 birds, killed on the highways was compiled on two rather extensive automobile trips through the Western States. In the summer of 1927 approximately 7,500 miles were covered while in the summer of 1929, 9,200 miles of road were traversed. All bird remains were examined and identification was attempted although in certain cases especially in Indiana through Kansas and Iowa and again on the Pacific coast the heavy traffic made the task a difficult one. The majority of the birds listed as "unidentified" were probably English Sparrows. An attempt was made to ascertain whether or not some of the Hawks, Owls and Eastern Crow might have been shot. In a few cases the condition of the specimen was such that it was impossible to be certain but no bullet holes were found in the specimens listed. Furthermore birds shot on the road are usually killed by passing motorists in direct violation of the law and such records should be included in a list of the toll taken by the highways.

A listing of the forty-two species in the order of their abundance follows:
English Sparrow¹ 166, Indiana through Kansas, Iowa, Utah and Cali-