

the highway between Matamoros and Ciudad Victoria, Tamaulipas, on July 18, 1949, and by Zimmerman (Wilson Bull., 69, 1957:275) at more northern localities on the same road on three dates in 1955. The Scissor-tailed Flycatcher, therefore, seems to be a relatively common and conspicuous species in this border region, which has been traversed by many ornithologists on their way to and from the tropics. Consequently, I failed to appreciate the significance of the nest at the time and collected neither the nest, young, nor adult. There seemed no doubt that the nest belonged to a Scissor-tailed Flycatcher which was perched a few feet away when first discovered and which remained nearby during the several minutes that I took to inspect the nest. The time was about 8:00 p.m. and after sunset. The nest contained five young with white down on their pterygiae and with broad, carinate bills of the flycatcher type. No other adult flycatchers were seen. The nest was six feet from the ground in a tree eight feet high. Low bushes, mostly less than four feet high, predominated on the flat, rather barren, surrounding countryside, where yucca and prickly pear were common.—JERRAM L. BROWN, *Museum of Vertebrate Zoology, Berkeley, California, January 8, 1958.*

The Sequence of the Songbird Families.—All families and orders of birds are anatomically very similar to each other, much more so than those of reptiles or mammals, but nowhere is this similarity as great as among the families of songbirds (Oscines, Passeres). Except for the larks (absence of a pessulus) and the swallows (closed bronchial rings) there is apparently no family that can be defined unequivocally by anatomical characters. Many attempts have been made to establish reasonable systems by using characters that show variation among the songbirds. Some authors have used the shape of the bill, others the reduction of the outermost primary, the conformation of the tongue, the development of the central nervous system, the scutellation of the tarsus, the musculature of the jaw, the processes of the bones on the palate, and so forth. None of these characters has found universal favor. The objections are always the same: there is always a hint that the real significance of the character is functional rather than phyletic, and that it arises polyphyletically whenever adaptive needs demand it. The simplest condition is by no means necessarily the primitive one, because specializations and elaborations can be lost again with shifts into different ecological niches (contrary to the so-called irreversibility rule!). Consequently, a morphological series is not necessarily an evolutionary series. Finally, each character or character complex may show evolutionary trends that are different from those of other characters.

To resolve this baffling stalemate there is a continued search for new and more reliable characters. In a recent note, Dr. Wetmore (Condor, 59, 1957:207–209) attributed considerable importance to the form of the head of the humerus, a character also described by Ashley (Condor, 43, 1941:184–195) and earlier authors. In view of the scarcity of other available characters this newly utilized feature is highly important. Unfortunately this character is confronted by the same difficulties as the ones mentioned previously. It may be assumed, with Wetmore (*op. cit.*), that the divided fossa is the derived condition and that it is preceded by a condition similar to that shown in *Corvus*. Yet, a divided fossa occurs also among the gulls and perhaps in other non-passerine groups which surely acquired this feature independently. How many times was this character acquired independently among the songbirds? Even closely-knit groups like the "American Insect Eaters" (*sensu* Zimmer) are heterogeneous for this character; according to Berger (Bull. Amer. Mus. Nat. Hist., 113, 1957:231–272), the fossa is undivided in the Cyclarhidae and Vireonidae, and divided in the other families (with an occasional exception). Among four specimens of *Vireo flavifrons*, Berger found a graded series from the undivided to the distinctly divided condition. In the Old World Insect Eaters, Berger found an undivided fossa among the Pycnonotidae, Lanidae, Sylviidae, and Timaliidae, while the specimens of Turdidae and Muscicapidae which he examined had a divided fossa. How often the undivided fossa is a secondary return from a divided condition cannot be determined until the functional significance of these various configurations of the head of the humerus are better understood. It seems that the humeral fossa is no more reliable as a basis of classification than any other single character.

More disturbing is the thought that the entire approach of classifying families of songbirds into "primitive" or "advanced" ones may never lead to an unequivocal answer. It is becoming more apparent from day to day that phyletic lines do not develop as harmonious "types," but rather that most evolution is of the "mosaic type," as DeBeer and others have pointed out. This means that different organs evolve at different rates, some remaining primitive, while others evolve rapidly.

Archaeopteryx is a famous example of mosaic evolution; the South African apeman *Australopithecus* is another. However, these are not exceptions, and as far as the songbirds go, one finds a mixture of "primitive" and "advanced" characters in almost every family. It is this fact of mosaic evolution which, perhaps more than any other, is responsible for the divergence of opinion on the arrangement of the families of songbirds into "more primitive" and "higher" ones. Depending on the organ system chosen, whether wing, bill, legs, or brain, a different sequence will emerge.

There is a challenge to weigh the different characters and to use them in combination as the basis of a new system. This has been tried in recent years by Mayr and Amadon (Amer. Mus. Novit., No. 1496, 1951:1-42), Wetmore (Smiths. Misc. Coll., 117, 1951:1-22), Amadon (Proc. Calcutta Zool. Soc., Mookerjee Mem. Vol., 1957:259-268), and Delacour and Vaurie (Los Angeles County Mus., Contrib. in Sci. No. 16, 1957:1-6). Each of these systems makes the explicit or implicit claim to be superior to the others. As mental exercises these proposals are stimulating, and together with many others previously proposed they contribute to the ultimate understanding of avian evolution. Unfortunately, however, this delightful diversity of opinion is not very practical. If the student of the birds of the world opens the pages of a faunistic list, local handbook, or national or international journal, he must be able to remember each of the five or six sequences most frequently used in the world literature. Otherwise he will not know whether to look at the beginning or the end of the songbird sequence when he wants to find the pipits, shrikes, or crows.

This chaotic situation has long been a source of annoyance to working ornithologists. As a result, at the XI International Ornithological Congress at Basel, a committee was charged with the task of proposing a sequence of songbird families that would be acceptable to the majority, and the acceptance of which might lead to uniformity instead of the present chaos. The committee members voted individually on the three sequences most frequently used throughout the world, and all six voting members (Berlioz, Dementiev, Junge, Moreau, Salomonsen, and Stresemann) expressed their preference for the sequence that starts with the Old World Insect Eaters and ends with the crows and birds of paradise.

The reason for their preference was stated by several members of the Basel Committee as follows: it is the sequence most frequently used in the world literature and is no more arbitrary than any other proposed sequence. No claim is made in the report of the committee that the adopted sequence is the best possible system or even a final one. There is no reason why anatomists and other students of avian classification should not continue to make proposals for revision and state their reasons for considering a different arrangement as superior. Indeed, our present knowledge of the comparative anatomy and ethology of passerine birds is still so slight that enormous future progress in our understanding is to be expected. However, until the superiority of a different sequence is clearly established, it would seem advantageous for the ornithologists in the different parts of the world to follow an internationally endorsed sequence. This would surely facilitate communication.

The sequence adopted by the Committee of the International Congress, the so-called Basel Committee, was published by Mayr and Greenway (Breviora no. 58, 1956:1-11).—ERNST MAYR, *Museum of Comparative Zoology, Cambridge, Massachusetts, December 5, 1957.*

The Dickcissel in California.—On November 19, 1957, a bird of sparrow size was taken in one of my banding traps located on the campus of Humboldt State College at Arcata, California. As I was preparing to band the bird I realized that it was of a species unfamiliar to me. It was taken alive to the Wildlife Department at the college where it was identified as a Dickcissel (*Spiza americana*) and added to the Humboldt State College collection.

There was no indication that this individual had been a captive for it was quite wild and in excellent condition, with heavy fat deposits, both subcutaneous and in the body cavity. The bird was a male and was in the typical winter plumage of the species. The black throat patch was almost lacking except for a few black tipped feathers. The chestnut on the wing was very distinctive as was the yellow breast. The bird had evidently entered the trap in quest of the bread crumbs used for bait.

Apparently this is the second record of the species in California. The first record was based on an individual captured in September, 1948, in Santa Monica by Mrs. Norris Kittinger, who released the bird after identification (Condor, 51, 1949:44).—JACK B. WOODY, *Humboldt State College, Arcata, California, January 15, 1958.*